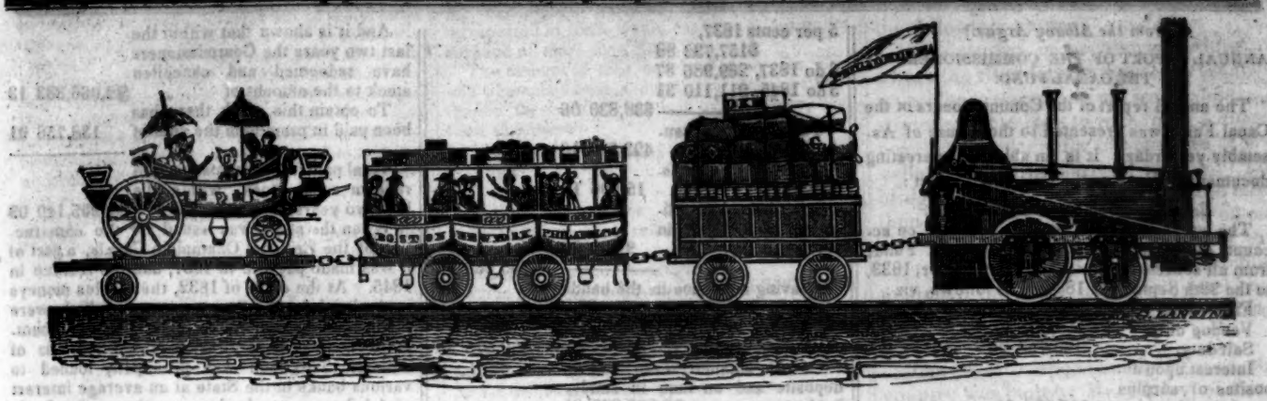

AMERICAN RAILROAD JOURNAL,
AND ADVOCATE OF INTERNAL IMPROVEMENTS.

PUBLISHED WEEKLY, AT No. 35 WALL STREET, NEW-YORK, AT THREE DOLLARS PER ANNUM, PAYABLE IN ADVANCE.

D. K. MINOR, Editor.] SATURDAY, JANUARY 17, 1835. [VOLUME IV.—No. 2.

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AMERICAN RAILROAD JOURNAL.

NEW-YORK, JANUARY 17, 1835.

☞ The Postmaster at Desmond, M. T., is particularly desired, after he has *read* the Railroad Journal, to put it again into an envelope, and forward it to the gentleman who has a *right* to open it.

☞ We again request those who desire missing numbers of the Journal to give us a list of them when they forward their subscription for the 4th volume.

☞ If "A Reader," or any other friend, will send us a copy of the letter giving an account of the progressing works of the Pacha of Egypt, or other works of internal improvement, we will publish them with pleasure.

To the Editor of the Railroad Journal.

Sir,

The comparison of the foreign and domestic tonnage of this port, with that of the Erie canal, furnished by the collectors of this port and Utica, published in your Journal, has led me to the inquiry of the trade beyond our own State, to and from Buffalo, for the years 1832 and 1833, where the singular fact is presented, that, out of the 967,813 barrels of flour which passed Utica in 1833, only 75,565 barrels came from beyond Buffalo, (not 8 per cent.,) being an increase of 300 per cent., in one year, over 1832. The collector's returns of this year for Buffalo is not yet received; but the increase of flour for 1834, passing Utica, is 189,246 barrels, a large part of which may with propriety be placed to the increased commerce with Ohio, owing to the completion of their canal—A TRADE, TOO, TRULY IN ITS INFANCY, as we find by statements furnished by A. C. Flagg to C. F. Mercer, Esq., [see Congressional Document, No. 414, p. 225,] that nine-tenths of the bread stuffs, provisions, &c., transported on the Erie canal, are produced by our own state. We find, also, that the Governor, in his last message, observes that it is necessary to "enlarge" the Erie canal, as well as make *double* locks, and states his regret that a law to this effect did not pass at the last Session. In this opinion I cannot agree with him, as I think that on examination it will be discovered that an attempt to enlarge the Erie canal will be attended with more difficulties than at first meet the eye, with the certainty of destroying one or more years of business, to the ruin of thousands, and injury of this city, by directing the trade into other channels.

It is not ten years since the Erie canal has been completed, and in that short period it has produced its entire cost. In three years more, the comptroller will be in funds, for the cost of the Erie, Champlain and lateral canals. Under this view, and the evident incapacity of the Erie canal to supply *the wants of our own State*, an enlightened forecast should prompt us to at once commence an enlarged or steamboat canal, 90 feet wide, and 9 feet deep, around the falls of Niagara, from Oswego to the Hudson, to serve the wants of the growing "far West," as it must be clear to any observer, that, even with double locks and enlarging the Erie canal, it will only serve the purposes of our own State for some 10 or 15 years, unless relieved by the "Ship Canal" project, and *railroad facilities from Utica*.

So soon as the tolls are reduced, as is contemplated, the produce of the finest forests, in ship timber, lumber, &c., and the exchange of commodities throughout the canal, will produce a trade that cannot be imagined, when, ere 15 years, we shall have in this State a population of 4,000,000, now estimated at 2,500,000, of which *above* 250,000 souls reside in this city.

The table I have alluded to shows that only 28,683,708 lbs. of the 157,357,547 lbs. of merchandize, which passed Utica in 1833, was destined beyond Buffalo; whilst of furniture, farmers' and mechanics' tools, there passed by Utica 7,595,732 lbs., and beyond Buffalo 7,568,846 lbs., showing an increase of transport of 1833 over 1832 of 2,677,425 lbs.; and the year 1834 shows a further increase for that year of 3,077,070 lbs. over 1833, or 10,672,802 lbs. passing Utica: showing clearly the immense current of population setting to the "far West," from whom as yet we have received no returns, and whose wants from the sea-board are yet very limited.

The report of merchandize in 1832 from Buffalo was 13,351,729 lbs.; in 1833, 28,683,708 lbs., being an increase of more than 100 per cent., and there is no doubt it will progress in the same ratio for several years, particularly when such crowds of emigrants are passing to the West; and we find that the Territory of Michigan, by official accounts, has trebled her population in 4 years, and now claims admittance into the Union.

With such facts before the public, the merchants and property holders in this city are deeply interested in the contemplated project of an enlarged and separate canal, to connect the Hudson with the Upper Lake, and thence by the Illinois river to New-Orleans, by steam, and should at an early day give an expression of their sentiments to the Legislature, by a public meeting to adopt measures to promote the object.

J. F. B.

To the Editor of the Railroad Journal:

Dear Sir,—A few days since I was invited by one of the managers of the West-Point Foundry to inspect a locomotive engine just completed at that establishment, designed for the Tuscumbia, Courtland and Decatur Railroad; and as its construction is somewhat different from others, perhaps a description of it will be interesting to your readers. It is raised on four 4½ feet wheels; the hubs are of cast iron, with wrought iron spokes and tires; the outside frame is entirely iron, securely bolted; the inside rails are of wrought iron—(hitherto, in all engines made in this country, they have been made of wood); all the working parts are of cast steel, and appear to have been finished with great care. The weight of the engine, with the boiler, is 6¼ tons; it will carry 80 tons at the rate of 18 miles per hour on a level railroad. The appearance of the engine is by far the handsomest I have ever seen, either in this country, or in Europe; and the managers state that the West-Point Association will guarantee that any that they may hereafter build shall be equal to any made in the world.

I am, &c. Unit.

New-York, January 15, 1835.

[*From the Albany Argus.*]

ANNUAL REPORT OF THE COMMISSIONERS OF THE CANAL FUND.

The annual report of the Commissioners of the Canal Fund, was presented to the house of Assembly yesterday. It is an able and interesting document. We give the following extract:

Erie and Champlain Canal Fund.

The actual amount of revenue received on account of the Erie and Champlain Canal Fund, from all sources, from the 30th September, 1833, to the 30th September 1834; is as follows, viz:

From tolls,	$1,313,155 84	
Vendue duty,	169,337 04	
Salt duty,	160,782 98	
Interest upon deposites of surplus moneys,	117,092 00	
Interest upon loan to Albany, and upon investments in stocks,	4,082 64	
Rents of surplus waters,	5,438 50	
Sales of lands,	2,441 03	
Anonymous,	15 37	
Proceeds of sale of a canal boat,	19 40	
		$1,772,364 80

The actual amount of expenditures during the year, has been as follows, viz:

For interest on canal debt,	$278,173 26	
Repairs of the canals, by superintendents,	423,517 10	
Payments on account of canals, by Canal Commissiones,	15,006 17	
Salaries of weigh masters, assistants, &c.,	4,511 25	
Printing for canals,	2,646 68	
Tolls refunded,	88 93	
Costs of suits for penalties,	56 35	
Balances of collectors' accounts,	299 40	
Payment to proprietors of Albany basin,	3740 48	
Payment to Samuel Young, Canal Commissioner,	509 64	
Payment to canal appraisers,	18 00	
Salary of 2d Deputy Comptroller, canal department,	1,650 00	
Extra allowances,	3,135 32	
Sundry miscellaneous payments,	3,247 29	
		736,699 88

Thus showing the nett revenue of the Erie and Champlain Canal Fund, after paying all expenses, to amount to the sum of $1,035,664 92

The surplus funds in the hands of the Commissioners, on the 30th September, 1833, as shown in the annual report of last year, amounted to the sum of $2,602,694 76

The amount received by the Commissioners for the year ending 30th September, 1834, from all sources, is, 1,765,147 33

Making a total sum to be accounted for by the Commissioners, of $4,367,842 09

This sum is accounted for as follows, viz:

Paid for interest upon canal debt,	$278,173 26	
For purchase of canal stocks, viz:		
5 per cents 1837,	$157,732 88	
6 do 1837,	269,986 87	
5 do 1845,	211,110 31	
	638,830 06	
To canal superintendents,	423,517 10	
To Canal Commissioners,	15,006 17	
To sundry expenditures, as detailed in statement A,	9,739 20	
		1,365,265 79
Leaving a balance in the hands of the Commissioners, on the 30th September, 1834, applicable to the canal debt, of		$3,002,576 30
Of this balance, there was in deposite and on loan in sundry banks,	$2,823,823 35	
Loaned and invested in stocks,	178,752 95	
		$3,002,576 30

Thus accounting for the whole amount of the surplus funds under the care and management of the Commissioners.

Canal Debt and Redemption of Stock.

In the last Annual Report, the total amount of Erie & Champlain Canal stock, remaining unpaid on the 30th September, 1833, was stated at $5,522,659 29

Redeemed during the year ending 30th September, 1834, 588,006 61

Total amount of Erie & Champlain Canal stocks unpaid 30th September, 1834, $4,934,652 68

From this amount deduct the means in the hands of the Commissioners at the close of the fiscal year, applicable to the payment of this debt, as before stated (omitting $27,153 71 of bonds for lands,) 3,002,576 30

And there will remain a balance of the Erie and Champlain Canal debt, as yet unprovided for, of $1,932,076 38

It was stated by the Commissioners in the last Annual Report, that if the receipts for each of the next three years should equal those for the year embraced in that report, the funds accumulated would be sufficient to cancel the whole debt contracted for the construction of the Erie & Champlain Canals, nine years before the latest period fixed by the State for the redemption of the stock. This opinion is fully sustained by the receipts for the year ending 30th September, 1834; the sum applicable to the debt, after paying the current expenses of the year, being more than a million of dollars; and leaving a balance of debt to be provided for, of less than two millions. If the annual nett revenue from the canal fund for the two succeeding years, should equal that of the year ending on the 30th September last, the means would be provided for the final extinguishment of the Canal Debt on the 30th September, 1836.

The contemplated improvements, of doubling the locks from Albany to Syracuse, and rebuilding the aqueduct across the Genesee river at Rochester, authorised by the act, chap. 312, of the laws of 1834, will require the expenditure of from six hundred thousand to a million of dollars, and to this extent will diminish the estimated means for the payment of the canal debt within the next two years. But it is believed the proceeds of the canal revenues will furnish the means for these extraordinary disbursements, and also for the payment of the whole debt contracted for the construction of the Erie and Champlain canals, by the close of the fiscal year in 1837

The Commisioners have continued to purchase canal stock with the surplus funds in their hands, and during the year ending on the 30th September, 1884, have obtained and cancelled stock issued for the construction of the Erie and Champlain canals to the amount of $588,006 61. In 1833, as shown by the last annual report, the Commisnioners purchassed stock to the amount of $1,478,376 71

Add purchases of 1834, 588,006 56

And it is shown that within the last two years the Commissioners have redeemed and cancelled stock to the amount of $2,066,383 13

To obtain this stock there has been paid in premiums the sum of 136,756 91

Total paid from surplus funds to redeem canal stock, within the last two years, $2,905,140 09

When the stock was issued for the construction of the Erie and Champlain Canals, a part of it was made payable in 1837, and the residue in 1845. At the close of 1832, the surplus moneys in the hands of the Commissioners, which were pledged to the redemption of this debt, amounted to something more than three millions of dollars. This sum was principally loaned to various banks in the State at an average interest of 4 1-2 per cent. In this way, the surplus funds destined for the payment of the canal debt, necessarily became interwoven with the business operations of the State. The first instalment on the debt, being $3,489,000 00, becomes payable on the first day of July, 1837. The withdrawal of this large sum from the business of our citizens on a particular day, it was apprehended by the commissioners, as stated in their former reports to the legislature, might prove a serious inconvenience to those who had accommodations from the Banks, as well as to the banks themselves. By the gradual purchase of the stock, the Commissioners effected the double object of lessening the deposites in the banks, and at the same time of diminishing the amount of the stock redeemable in 1837. Thus far their exertions have been as successful as could reasonably be anticipated. Of the debt of 1837, the sum of $1,459,982 70 has been paid; leaving of the stock reimbursable in 1837 the sum of $2,029,007 30; a sum which can be paid in a single year, without much inconvenience. The purchase of stock, however, will be continued, and the sum reimbursable in 1837 will probably be reduced one-half in the year 1835 and 1836. In this way the objects of the Commissioners will have been accomplished, and the debt of 1837 cancelled, without the slightest inconvenience to the business operations of the State.

Management of the Canal Fund Moneys.

The nett revenues of the Erie and Champlain Canal Fund amount to about one million of dollars annually; and there is now an accumulation of the surplus in the hands of the Commissioners, amounting to more than three millions of dollars. The management of these moneys was entrusted to the Commissioners of the Canal Fund by the original law passed in 1827, "respecting navigable communications between the great Western and Northern Lakes and the Atlantic Ocean."

[Here follows a detail of the arrangements made for loaning the surplus moneys from 1827 to 1834, at 3 1-2, 4 1-2 and 5 per cent.]

At the close of the fiscal year, the surplus moneys belonging to the Erie and Champlain Canal Fnnd were loaned and deposited at rates of interest varying from 3 1-2 to 5 per cent. in the following porportions, viz:

Terms of Deposite.	Amount on Loan of Deposite.	Annual interest.
On Loan at 5 per cent. payable at 60 days' Notice.	$611,000 00	$30,550 00
do 4 1-2 do	1,204,784 38	54,215 29
On Deposite at 4 1-2 per cent. payable at sight.	976,861 93	43,958 78
do 3 1-2 do	31,177 04	1,091 19
	2,823,823 35	129,815 26

The efforts of the Commissioners to make such arrangements as would enable them to command the money whenever it should be required, to pay for or purchase stock, and at the same time to realize an interest upon it, have been entirely successful. The Commissioners have drawn upon these deposits to the amount of between 7

and 800,000 annually, (from 1826 to the present time, to pay the interest upon the debt and the repairs of the canals; they have drawn about two millions eight hundred thousand dollars for the purchase of canal stock; and at the same time there has been added to the canal fund more than four hundred and eight thousand dollars, from interest on the surplus monies loaned to and deposited in the Banks during the last nine years, viz:—

Received for interest on deposits,		1826	$4,515 04
do	do	1827	4,987 96
do	do	1828	7,281 20
do	do	1829	7,576 30
do	do	1830	24,000 17
do	do	1831	35,710 31
do	do	1832	84,619 15
do	do	1833	122,236 74
do	do	1834	117,092 00
			$408,018 87

The above sum of $408,018 87, embraces only the amount of interest paid by the Banks. The fund has been increased by interest on other investments of the surplus, to the amount of $101,835 65; making a total increase to the fund from interest on investments and deposites since 1826, of $509,854 52. Add to this the fact, that during the same period, there has been collected for tolls, and auction and salt duties, between eleven and twelve millions of dollars, through the agency of the banks, and of the numerous collecting agents, without loss of a single dollar to the State, and the best evidence is furnished of which the case is susceptible, that the great interests of the State have not been neglected or disregarded by those who have been entrusted with the collection and management of the Canal revenues.

Reduction of Tolls.

The Canal Board, in January last, made a reduction in the rates of toll, on merchandize, of 25 per cent. and a reduction on wheat, flour, salted beef and pork, butter and cheese, of 12 per cent. and a considerable reduction on various other articles.

The following comparative statement of the sums charged on property transported, shows the extent of the diminution in the rates of toll, within the last two years, and the saving which these modifications secure to those who use the canals.

	1832.	1833.	1834.
Toll on 1000 lbs. merchan. from Albany to Buffalo.	$5.08 2-10	$4.35 6-10	3.26 70-100
Toll on 1000 lbs. flour and provisions f'm Buffalo to Albany	2.54	1.81 5-10	1.62 35-100
Total,	$7.62 2-10	$6.17 1-10	4.89 5-100

The toll on an ordinary boat load of 30 tons of merchandize from Albany to Buffalo (363 miles) would amount, by the rates in 1832, to $304 92
And by the rates in 1834, to 196 02

Gain to the owner of the property on a single load, $108 90

The toll on 30 tons of wheat, flour, or provisions, from Buffalo to Albany, would amount, by the rates of toll in 1832, to $152 46
And by the rates in 1834, to 97 41

Gain to the owner by the reduction in the rates of toll, $55 95

It is thus seen, that on a comparison of the rates of toll as now established, with the rates of 1832, the person who has a cargo of 30 tons of produce to carry from Buffalo to the Hudson River, and carries back a cargo of 30 tons of merchandize, makes a clear saving by the reduction in the rates of toll, of $163 95.

It has been estimated that the reduction in the rates of toll in 1833, applied to the same amount of property which was transported on the canals in 1832, would produce a loss in the aggregate amount of revenue equal to $150,000; and that the reductions in 1834, applied to the property transported in 1833, would occasion a loss to the revenue of more than $200,000.

The amount of tolls collected upon the Erie and Champlain canals, during the season of navigation for each of the last four seasons, has been as follows:

In 1831, at the old rates of toll,	$1,194,610 49
1832 do do	1,195,804 23
Total in two seasons	$2,390,414 72
In 1833, (average reduction of tolls about 20 per cent.)	$1,422,695 22
In 1834, (further average reduction of 15 per cent) about	1,800,000 00
Total in two seasons	$2,722,695 22

This statement shows, that notwithstanding a reduction in the rates of toll which is equal to 35 7-8 per cent, within the last two years, such has been the great increase of business upon the canals, that the aggregate amount of tolls collected from the opening to the closing of navigation in the years 1833 and 1834, exceeds the collections for 1831 and 1832, by the sum of $332,280 50.

We condense from the report the following view of the results in relation to the lateral canals:

Oswego Canal.	
Expenditures	$33,889 84
Received for tolls	2..240 01
Paid from general fund to make up deficit,	12,649 83
Cayuga and Seneca Canal.	
Expenditures	20,866 17
Received for tolls,	17,104 41
Paid from general fund to make up deficit,	3,761 76
Chemung Canal.	
Expenditures	42,425 46
Received for tolls	1,701 96
Paid from general fund to make up deficit	$40,723 85
Crooked Lake Canal.	
Expenditures	21,731 49
Received for tolls	1,007 60
	20,723 89

There was a balance of $7,894 07 in the hands of the Commissioners at the close of the year 1833, and there has been drawn from the treasury for deficiencies in the revenues of this canal, the sum of $13,829 82.

Suspension Bridges, No. I.

To the Editor of the Railroad Journal.

SIR,—It has occurred to me, since I sent you the drawing of the suspension bridge, for forming a connection between New-York and Brooklyn, that a short descriptive account of the principal suspension bridges now in existence would be interesting to many of your readers. Should you concur with me in this opinion, I will, at my leisure, furnish you with a series of papers on the subject, commencing with the following.

We are informed by travellers, that suspension bridges, formed of chains of iron, are now to be seen in China and the East Indies of great antiquity; but as these are of such a description as to furnish no practical information relative to the mode of constructing modern suspension bridges, we shall not trouble your readers with any account of them here.

With the exception of the Winch bridge, constructed about the year 1741, it does not appear that any bridges on the suspension principle were to be found in Europe till the 19th century. This bridge is described in Hutchinson's antiquities of Durham, printed at Carlisle in 1794, in the following words:

"About two miles above Middleton, where the river falls in repeated cascades, a bridge, *suspended on iron chains*, is stretched from rock to rock, over a chasm near 60 feet deep, for the passage of travellers, but particularly of miners. The bridge is 70 feet in length, and little more than 2 feet broad, with a hand rail on one side, and planked in such a manner that the traveller experiences all the tremulous motion of the chain, and sees himself suspended over a roaring gulf on an agitated and restless gangway."

The first suspension bridge in this country was built by Mr. Finley, of Pennsylvania, in 1796, across Jacob's creek, between Union Town and Greenburgh. The length of the bridge was 70 feet. Mr. Pope, in his treatise on bridge architecture, describes several others as having been erected by this gentleman. The largest across the Schuylkill is 306 feet long. It is borne by two chains, one on each side, the iron of which is 1¼ inch square. Another across the Brandywine at Wilmington is 145 feet long, 30 feet wide, and is borne by four chains, the iron of which is 1⅜ inch diameter. In the same work we have also an account of a chain suspension bridge of considerable strength erected over the Merrimack, near Newburyport, Massachusetts, by John Templeman, Esq. The span of this bridge is 244 feet. The pieces upon which the timber framed work for suspending the chains is erected are of stone, 47 feet long and 37 feet high. The timber suspension frames are 35 feet high. The bridge is formed of 10 chains, the ends of which are carried down into deep wells in each bank, and are therein fixed to heavy stones; each chain is 516 feet long; and at the top of the suspension frames the chains are tripled and made with short links. The four middle joists rest on the chains, the rest are suspended from the chains by rods to keep the road horizontal. There are two roadways, 15 feet in width each, and the floor is said to be so solid as to admit of horses, carriages, &c. to travel at any speed without occasioning any considerable vibration. The chains are arranged three on each side and four in the middle. The height from the water to the floor of the road-way is 40 feet. It is stated that the whole expense did not amount to 25,000 dollars.

In Mons. Cordier's Historie de la Navigation Interieure, published in 1820, it is stated that 40 bridges on Mr. Finley's plan had been erected, at that time, in this country. He mentions one, built in 1815, on the Lehigh, a mile below Northampton, it consists of two openings and two semi-arches; its whole length is 475 feet. The chains are placed so as to divide the platform into four ways, two for carriages in the middle, and a foot path on each side. The chains were made with iron bars 1¾ inch square. The cost, 20,000 dollars.

The attention of British engineers appears to have been first directed to the

subject of suspension bridges in the year 1814, when it was proposed to substitute a bridge over the river Mersey in lieu of the ferry at Runcorn-gap, about twenty miles below Liverpool. From the nature of the navigation it was necessary that the bridge should consist of not more than three openings, the centre one of 1000 feet and two others of 500 feet each, and that its height above the surface of the water should not be less than 60 feet. The celebrated engineer, the late Mr. Telford, having been applied to on the subject, proposed the erection of a suspension bridge. It was to consist of 16 iron cables, each formed of 36 square half inch iron bars; and of the segments of cylinders proper for forming them into one immense cable, which, including the fixings on shore, was to be nearly half a mile long, and about 4¼ inches diameter. When this bridge was proposed there existed very little experience in the construction of suspension bridges, and in order to obtain proper data for proportioning the strength of the various parts, Mr. Telford instituted a very valuuble course of experiments, some account of which I shall probably give in a future number. This bridge has not yet been erected, but as it served to call the attention of scientific men to the subject, and may thus be considered as the origin of the great extension that has since been given to this mode of bridge building in Europe, I thought this account of it here would not be out of place. W. L.

Dec. 15th, 1834.

P. S.—In making out the design of the suspension bridge over the East river, I have supposed the piers for the suspension towers, &c. to be constructed of masonry: this would evidently be the most durable mode of construction, but I could furnish a design for a very substantial bridge, the piers and suspension towers of which should be wholly constructed of timber. The expense would thus be very greatly reduced, as we could then dispense with the use of coffer-dams for the foundations of the piers. The cost of such a bridge would not, probably, much exceed the receipts of the Fulton Ferry company for one year.

(To be continued.)

[From the Repertory of Patent Inventions.]

Report on the Progress and Present State of our Knowledge of Hydraulics as a Branch of Engineering. By GEORGE RENNIE, Esq., F. R. S., &c. &c. Part I.

The Report of which the following is a part, has appeared in the recently published "Report of the Third Meeting of the British Association for the Advancement of Science; held at Cambridge in 1833." We purpose to present our readers with the whole of Mr. Rennie's review of the history of hydraulics, as applied to engineering, in successive extracts.

The paper now communicated to the British Association for the Advancement of Science, comprises a Report on the progress and present state of our knowledge of hydraulics as a branch of engineering, with reference to the principles already established on that subject.

Technically speaking, the term hydraulics signifies that branch of the science of hydrodynamics which treats of the motion of fluids issuing from orifices and tubes in reservoirs, or moving in pipes, canals, or rivers, oscillating in waves, or opposing a resistance to the progress of solid bodies at rest.

We can readily imagine that if a hole of given dimensions be pierced in the sides or bottom of a vessel kept constantly full, the expenditure ought to be measured by the amplitude of the opening, and the height of the liquid column.

If we isolate the column above the orifice by a tube, it appears evident that the fluid will fall freely, and follow the laws of gravity. But experiment proves that this is not exactly the case, on account of the resistances and forces which act in a contrary direction, and destroy part of, or the whole, effect. The developement of these forces is so extremely complicated that it becomes necessary to adopt some auxiliary hypothesis or abbreviation in order to obtain approximate results. Hence the science of hydrodynamics is entirely indebted to experiment. The fundamental problem of it is to determine the efflux of a vein of water or any other fluid issuing from an aperture made in the sides or bottom of a vessel kept constantly full, or allowed to empty itself. Torricelli had demonstrated that, abstracting the resistances, the velocities of fluids issuing from very small orifices followed the subduplicate ratio of the pressures. This law had been, in a measure, confused by subsequent writers, in consequence of the discrepancies which appeared to exist between the theory and experiment, until Varignon remarked, that when water escaped from a small opening made in the bottom of a cylindrical vessel, there appeared to be very little, or scarcely any, sensible motion in the particles of the water; from which he concluded that the law of acceleration existed, and that the particles which escaped at every instant of time received their motion simply from the pressure produced by the weight of the fluid column above the orifice; and that the quantity of motion or expenditure is in the ratio of the breadth of the orifice, multiplied by the square of the velocity, or, in other words, that the height of the water in the vessel is proportional to the square of the velocity with which it escapes; which is precisely the theorem of Torricelli. This mode of reasoning is in some degree vague, because it supposes that the small mass which escapes from the vessel at each instant of time acquires its velocity from the pressure of the column immediately above the orifice. But supposing, as is natural, that the weight of the column acts on the particle during the time it takes to issue from the vessel, it is clear that this particle will receive an accelerated motion, whose quantity in a given time will be proportional to the pressure multiplied by the time: hence the product of the weight of the column by the time of its issuing from the orifice, will be equal to the product of the mass of this particle by the velocity it will have acquired; and as the mass is the product of the opening of the orifice, by the small space which the particle describes in issuing from the orifice, it follows that the height of the column will be as the square of the velocity acquired. This theory is the more correct the more the fluid approaches to a perfect state of repose, and the more the dimensions of the vessel exceed the dimensions of the orifice. By a contrary mode of reasoning, this theory became insufficient to determine the motions of fluids through pipes of small diameters. It is necessary, therefore, to consider all the motions of the particles of fluids, and examine how they are changed and altered by the figure of the conduit. But experiment teaches us that when a pipe has a different direction from the vertical one, the different horizontal sections of the fluid preserve their parallelism, the sections following taking the place of the preceding ones, and so on; from which it follows, (on account of the [sensible] incompressibility of the fluid,) that the velocity of each horizontal section or plate, taken vertically, ought to be in the inverse ratio of the diameter of the section. It suffices, therefore, to determine the motion of a single section, and the problem then becomes analogous to the vibration of a compound pendulum, by which, according to the theory of James Bernoulli, the motions acquired and lost at each instant of time form an equilibrium, as may be supposed to take place with the different sections of a fluid in a pipe, each section being animated with velocities acquired and lost at every instant of time.

The theory of Bernoulli had not been proposed by him until long after the discovery of the indirect principle of *vis viva* by Huygens. The same was the case with the problem of the motions of fluids issuing from vessels, and it is surprising that no advantage had been taken of it earlier. Michelloti, in his experimental researches, *de Separatione Fluidorum in Corpore Animali*, in rejecting the theory of the Newtonian cataract, (which had been advanced in Newton's Mathematical Principles, in the year 1687, but afterwards corrected in the year 1714,) supposes the water to escape from an orifice in the bottom of a vessel kept constantly full, with a velocity produced by the height of the superior surface; and that if, immediately above the lowest plate of water escaping from the orifice, the column of water be frozen, the weight of the column will have no effect on the velocity of the water issuing from the orifice; and that if this solid column be at once changed to its liquid state, the effect will remain the same. The Marquis Poleni, in his work *De Castellis per quæ derivantur Fluviorum Aquæ*, published at Padua, in the year 1718, shows from many experiments, that if A be the orifice, and H the height of the column above it, the quantity of water which issues in a given time is represented by $2 A H \times \frac{0{\cdot}571}{1{\cdot}000}$, whereas, if it spouted out from the orifice with a velocity acquired by falling from the height H, it ought to be exactly 2 A H, so that experiment only gives a little more than half the quantity promised by the theory; hence, if we were to calculate from these experiments the velocity that the water ought to have to furnish the necessary quantity, we should find that it would hardly make it re-ascend one third of its height. These experiments would have been quite contrary to expectation, had not Sir Isaac Newton observed that water issuing from an orifice $\frac{1}{8}$ths of an inch in diameter was contracted $\frac{21}{25}$ of the diameter of the orifice, so that the cylinder of water which actually issued was less than it ought to have been, according to the theory, in the ratio of 441 to 625; and augmenting it in this proportion, the opening should have been $2 A H \frac{0{\cdot}805}{1{\cdot}000}$, or $\frac{4}{5}$ths of the quantity which ought to have issued on the supposition that the velocity was in the ratio of the square root of the height; from which it was inferred that the theory was correct, but that the discrepancy was owing to certain resistances, which experiment could alone determine. The accuracy of the general conclusion was affected by several assump-

tions, namely, the perfect fluidity and sensibility of the mass, which was neither affected by friction nor cohesion, and an infinitely small thickness in the edge of the aperture.

Daniel Bernoulli, in his great work, *Hydrodynamica, seu de Viribus et Motibus Fluidorum Commentaria*, published at Strasburg in the year 1738, in considering the efflux of water from an orifice in the bottom of a vessel, conceives the fluid to be divided into an infinite number of horizontal strata, on the following suppositions, namely, that the upper surface of the fluid always preserves its horizontality; that the fluid forms a continuous mass; that the velocities vary by insensible gradations, like those of heavy bodies; and that every point of the same stratum descends vertically with the same velocity, which is inversely proportional to the area of the base of the stratum; that all sections thus retaining their parallelism are contiguous, and change their velocities imperceptibly; and that there is always an equality between the vertical descent and ascent, or *vis viva:* hence he arrives, by a very simple and elegant process, to the equations of the problem, and applies its general formulæ to several cases of practical utility. When the figure of the vessel is not subject to the law of continuity, or when sudden and finite changes take place in the velocities of the section, there is a loss of *vis viva*, and the equations require to be modified. John Bernoulli and Maclaurin arrived at the same conclusions by different steps, somewhat analogous to the cataract of Newton. The investigations of D'Alembert had been directed principally to the dynamics of solid bodies, until it occurred to him to apply them to fluids; but in following the steps of Bernoulli he discovered a formula applicable to the motions of fluids, and reducible to the ordinary laws of hydrostatics. The application of his theory to elastic and non-elastic bodies, and the determination of the motions of fluids in flexible pipes, together with his investigations relative to the resistance of pipes, place him high in the ranks of those who have contributed to the perfection of the science.

The celebrated Euler, to whom every branch of science owes such deep obligations, seems to have paid particular attention to the subject of hydrodynamics; and in attempting to reduce the whole of it to uniform and general formulæ, he exhibited a beautiful example of the application of analytical investigation to the solution of a great variety of problems for which he was so famous. The Memoirs of the Academy of Berlin, from the year 1768 to 1771, contain numerous papers relative to fluids flowing from orifices in vessels, and through pipes of constant or variable diameters. "But it is greatly to be regretted," says M. Prony, "that Euler had not treated of friction and cohesion, as his theory of the linear motion of air would have applied to the motions of fluids through pipes and conduits, had he not always reasoned on the hypothesis of mathematical fluidity independently of the resistances which modify it."

In the year 1765 a very complete work was published at Milan by Paul Lecchi, a celebrated Milanese engineer, entitled *Idrostatica esaminata ne' suoi Principi e Stabilite nelle suoi Regole della Mensura della Acque correnti*, containing a complete examination of all the different theories which had been proposed to explain the phenomena of effluent water, and the doctrine of the resistance of fluids. The author treats of the velocity and quantity of water, whether absolutely or relatively, which issues from orifices in vessels and reservoirs, according to their different altitudes, and inquires how far the law applies to masses of water flowing in canals and rivers, the velocities and quantities of which he gives the methods of measuring. The *extensive and successful practice* of Lecchi as an engineer added much to the reputation of his work.*

In the year 1764, Professor Michelotti, of Turin, undertook, at the expense of the King of Sardinia, a very extensive series of experiments on running water, issuing orifices, and additional tubes placed at different heights in a tower of the finest masonry, twenty feet in height and three feet square inside. The water was supplied by a channel two feet in width, and under pressures of from five to twenty-two feet. The effluent waters were conveyed into a reservoir of ample area, by canals of brick-work lined with stucco, and having various forms and declivities; and the experiments, particularly on the efflux of water through differently shaped orifices, and additional tubes of different lengths, were most numerous and accurate; and Michelotti was the first who gave representations of the changes which take place in the figure of the fluid vein, after it has issued from the orifice. His experiments on the velocities of rivers, by means of the bent tube of Pitot, and by an instrument resembling a water-wheel, called the *stadera idraulica*, are numerous and interesting; but, unfortunately, their reduction is complicated with such various circumstances, that it is difficult to derive from them any satisfactory conclusions. But Michelotti is justly entitled to the merit of having made the greatest revolution in the science by experimental investigation.† The example of Michelotti gave a fresh stimulus to the exertions of the French philosophers, to whom, after the Italians, the science owes the greatest obligations. Accordingly, the Abbe Bossut, a most zealous and enlightened cultivator of hydrodynamics, undertook, at the expense of the French government, a most extensive and accurate series of experiments, which he published in the year 1771, and a more enlarged edition, in two volumes, in the year 1786, entitled *Traite Theorique et Experimental d' Hydrodynamique*. The first volume treats of the general principles of hydrostatics and hydraulics, including the pressure and equilibrium of non-elastic and elastic fluids against inflexible and flexible vessels; the thickness of pipes to resist the pressure of stagnant fluids; the rise of water in barometers and pumps, and the pressure and equilibrium of floating bodies: the general principles of the motions of fluids through orifices of different shapes, and their friction and resistance against the orifices; the oscillations of water in syphons; the percussion and resistance of fluids against solids; and machines moved by the action and re-action of water. The second volume gives a great variety of experiments on the motions of water through orifices and pipes and fountains; their resistance in rectangular or curvilinear channels, and against solids moving through them; and, lastly, of the fire—or steam-engine. In the course of these experiments, he found that when the water flowed through an orifice in a thin plate, the contraction of the fluid vein diminished the discharge in the ratio of 16 to 10; and when the fluid was discharged through an additional tube, two or three inches in length, the theoretical discharge was diminished only in the ratio of 16 to 13. In examining the effects of friction, Bossut found that small orifices discharged less water in proportion than large ones, on account of friction, and that, as the height of the reservoir augmented, the fluid vein contracted likewise; and by combining these two circumstances together, he has furnished the means of measuring with precision the quantity of water discharged either from simple orifices or additional tubes, whether the vessels be constantly full, or be allowed to empty themselves. He endeavored to point out the law by which the diminution of expenditure takes place, according to the increase in the length of the pipe or the number of its bends; he examined the effect of friction in diminishing the velocity of a stream in rectangular and curvilinear channels; and showed that in an open canal, with the same height of reservoir, the same quantity of water is always discharged, whatever be the declivity and length; that the velocities of the waters in the canal are not as the square roots of the declivities; and that in equal declivities and depth of the canal the velocities are not exactly as the quantities of water discharged; and he considers the variations which take place in the velocity and level of the waters, when two rivers unite, and the manner in which they establish their beds.

His experiments, in conjunction with D'Alembert and Condorcet, on the resistance of fluids, in the 1777, and his subsequent application of them to all kinds of surfaces, including the shock and resistance of water wheels, have justly entitled him to the gratitude of posterity. The Abbe Bossut had opened out a new career of experiments; but the most difficult and important problem remaining to be solved related to rivers. It was easy to perform experiments with water running through pipes and conduits on a small scale, under given and determined circumstances: but when the mass or fluid rolled in channels of unequal capacities, and which were composed of every kind of material, from the rocks amongst which it accumulated to the gravel and sand through which it forces a passage, —at first a rapid and impetuous torrent, but latterly holding a calm and majestic course,—sometimes forming sand-banks and islands, at other times destroying them, —at all times capricious, and subject to variation in its force and direction by the slightest obstacles,—it appeared impossible to submit them to any general law.

(To be continued.)

* See also Memoire Idrostatico-storiche, 1773.

† Sperimenti Idraulici, 1767 and 1771.

It seems that the tolls on the Pennsylvania Canals and Railroads, are to be reduced *twenty* per cent. from the time the navigation opens in the Spring.

PUBLIC LANDS.—From one of the documents accompanying the Report of the Secretary of the Treasury, it appears that during the year ending 31st December, 1833, there were sold of the public lands, 3,856,227,056 acres, for $4,972,284 84; and that the amount received in cash was $4,559,221 99, in forfeited land stock $47,230 55, in military land scrip $365,832 30—making a total of $4,972,284 84, as above. The amount of incidental expenses was $153,268 33; and the amount paid into the Treasury, $3,967,681 55.

During the first three quarters of 1834, there were sold 2,372,931,035 acres, for $2,996,596 01, of which $2,821,291 78 were paid in cash, $19,065 27 in forfeited land stock, and $156,238 95 in military land scrip. Incidental expenses, $115,799 79. Paid into the Treasury during the same period, $3,076,475 50.

AGRICULTURE, &c.

[*From the New-York Farmer.*]

WHEAT AND SOIL OF WEST NEW-YORK.—We do not believe either theory, or the most improved practice, will bear out the writer in his *maxim*, at the conclusion of the following extract from the Genesee Farmer. From the experiments that have been made in various sections of our primitive country, and from our notions of scientific agriculture, we believe many farmers who now enjoy good water, will be enabled to raise as good wheat as grows in the Genesee country.

The territory of New-York, included between Lake Ontario on the north, Lake Erie on the west, the line which divides the waters flowing into the lake from those which flow to the Susquehannah and Mississippi, on the south, and the counties of Madison, Oneida and Oswego, on the east—a tract of country about 50 miles in width by 150 in length, and containing not far from 8000 square miles,—is unquestionably one of the finest farming countries in the world, and possesses within itself more sources of agricultural wealth than any portion of the United States. In the amount of quantity, and excellence of quality, of its wheat, it is confessedly without a rival; and owing to peculiar causes, unless there is the most gross mismanagement in the treatment of the soil, this superiority it must retain. Lime and gypsum, two of the substances most relied on for keeping land in good heart, or restoring that which has been impoverished by bad management, are found in almost every section of this district in inexhaustible quantities; and in these two minerals, aided by the other means within the reach of the husbandman, is found a resource, which, if used with ordinary skill, cannot fail to render West New-York for ages, perhaps for ever, deserving its present high reputation of being the granary of America. In this territory wheat is, and probably will be, the great staple; to its culture, then, the attention of our farmers generally is directed; and any thing which has a tendency to prepare the soil for this valuable crop, or prevent the exhaustion of those peculiar qualities, on which the excellence of the wheat grown is founded, will receive a paramount regard. That there is a great difference in the capability for making fine flour in wheat grown on the northern or southern slope of West New-York, is so well known, that no proof of the fact need be adduced. Experienced millers have assured us, that this difference is equal to at least ten per cent. The wheat kernel, to be good, must be plump, thin skinned, and exhibit, whenever cut or broken, a body white of itself, and which is converted into flour by the slightest process. Inferior wheat, on the contrary, will be hard, dark colored, and when cut or broken, appear solid, smooth, and tenacious; such wheat can never make the first quality of flour. It is only on lands where lime is abundant, or where what is termed the hardness of the water indicates its extensive prevalence in the soil, that the finest wheat is produced. It may be set down as a maxim in practical husbandry, that good water, and good wheat land, are incompatible with each other; or in other words, that countries of primitive formation are not by nature adapted to wheat.

CORN—IMPROVED HUSBANDRY.—In the National Intelligencer we find the following extract from the Journal of a Traveller for agricultural information. We would recommend every young farmer, in particular, to travel in good farming districts, and to keep a diary of all he sees and hears that is, or *may be*, of importance.

Nov. 1, 1834.—Visited Mr. John Semmes, of St. Mary's county, Maryland, who informs us that his great crop of corn averaged upwards of twenty-five barrels the acre. Respectable judges of the county were appointed to ascertain the quantity of corn; and, after having accurately surveyed one acre, the corn was gathered and measured. First, a barrel being shelled to ascertain the accuracy of the barrel, eighteen or twenty of the respectable gentlemen of the county and of the adjoining county were present, saw the land measured, saw the corn measured, and are ready at any time to testify the fact, that the average acre, measured in their presence, amounted to twenty-five barrels and some pecks per acre. This farm is situated on the Patuxent river, fifteen miles below the "Cool Springs," or Charlotte Hall, and adjoining the farm on which Cole's Tobacco Inspection is—and the third from the Queen Tree. The farm is uncommonly hilly.

Process.—He prepares his ground by clover, the ground laid off from five by two and a half to three feet. The corn then dropped, three grains in the check, followed by persons who drop on the corn, or even if they are in advance of the corn droppers, a handful of two-thirds slacked ashes, and one-third plaster, mixed before it is dropped. Should the corn not come up regularly, he drops one or two seeds more, as may be necessary. He gathers his seed corn from the field before gathering the crop, so as to have a choice of ears. He plants from the 1st to the 10th of April, and ploughs four inches deep.

EARLY CORN AND WHEAT.—The following article was communicated to the N. E. Farmer by the Hon. Samuel Lathrop. We wish it was more general among men of influence to show their respect for agriculture, by communicating to periodicals the results of their experience and observation.

Last year, H. Huxley & Co. 81 Barclay street, obtained this corn from Judge Buel. Mr. D. F. Ames, of New-Jersey, planted it after his neighbors had finished planting their white corn. Mr. A.'s ripened first. Mr. D. S. Mills, of Long Island, planted it so late that other varieties would not have come to perfection. He had a good, though not a full crop.

Dear Sir—The farmers living in the valley of Connecticut river have, within a short period, greatly extended the cultivation of wheat beyond that of former years; a considerable proportion, probably the greater part, is sown after corn. We have suffered great inconvenience, and sustained some loss, from the impracticability of getting off our corn in season to sow the ground. Grain sown very late is more liable to be winter killed, and more exposed to blast, than that which is sown in its proper time. It has repeatedly happened with me, and I have not been behind all my neighbors, that I have not been able to get through the wheat sowing till after the middle of October. This is quite too late to expect a good crop. The business ought to be completed in September, and if it could be done by the middle of that month, I think we should be more certain of success.

In the summer of 1833, I was conversing with Judge Buel, of Albany, on this subject, when he informed me, that for a number of years, he had cultivated a kind of corn which was about a fortnight earlier than the kind most commonly used, and that he thought it equally profitable for cultivation. In consequence of this information I procured my seed corn of him last spring, and planted no other this season. The crop has exceeded my expectations. I never had a better one from the same quantity of land, and it came to maturity some time earlier than other fields of corn in the vicinity. I think it will prove a valuable species to those who wish to sow their land with wheat. In ordinary seasons, it will have become sufficiently ripe for harvest by the middle of September. It is a species of the twelve-rowed corn, but the growth of stalk is very small, compared with the twelve-rowed corn which I have been accustomed to plant—not exceeding one half the weight; of course, the exhaustion required to sustain an equal number of stalks is much less. This species of corn will bear planting much thicker than any other kind of field corn which I have ever cultivated. I this year planted the hills three feet apart in both directions, intending to have three stalks in each hill. But it may be planted three feet by two and a half, and then the ground will not be more shaded than it is with the corn generally raised here, when planted in squares of three and a half feet. The ears set low on the stalk, grow to a good size, and the grain is heavy. I think it is as valuable for use as any other kind of this grain; and from the fact that it will bear planting so thick, I believe that I can secure a larger product than from any other that I have ever tried. But the circumstance that gives it its chief excellence in my estimation, arises from the fact, that I can gather my corn in season for the sowing of wheat. In the most unfavorable season, the wheat may be sown in September, and in very favorable seasons, early in that month.

I am, very respectfully, yours, &c.

SAMUEL LATHROP.

West Springfield, Oct. 23, 1834.

GYPSUM.—Raspail has decided, as the result of a series of experiments, that "it is not the leaves of the leguminous plants that absorb the gypsum which is dusted over them, but the roots, when the dew or rain has washed it into the soil; and hence the advantage which has been found of applying this powder a little before the dew comes on." It was the practice of John Taylor, conspicuously known as the author of Arator, and one of the best practical farmers in Virginia, to sow his plaster for tillage crops before the last ploughing, that it might be buried in the soil, where the roots of plants required it. In applying it to grass lands, he recommended, if our memory serves us, that it be applied early, that the spring rains might convey it to the roots. We have, in the pamphlet of Judge Peters, upon the application of Gypsum, another corroboration of the correctness of M. Rapsail's conclusions. In many instances, there narrated, where the gypsum was sown at the commencement of a drought, or late in the season, it produced no apparent benefit that year. It would be useful if farmers would satisfy themselves upon this head, by sowing a part of a field early and a part late—a part before the last ploughing, and a part upon the growing crop. So far as our opinions have been formed from practice, they are in favor of sowing on grass in

April, and for tilled crops before the last ploughing.

Mr. Nutt's System of Bee Management.

[From the London Mechanics' Magazine.]

Mr. Editor,—After the notice of Mr. Nutt's intended publication of a Treatise on the Management of Bees, I anxiously waited for its appearance, and became possessed of a copy. After reading it through I wrote him a long letter, inquiring the cause of the opposition he stated he had met with, and offering my services gratuitously to introduce his system in the West of England. This letter Mr. Nutt (in an answer to a letter sent subsequently to his agent in London,) says he never received, and as the dead letter office has not returned it, the inference is, that it must have been improperly intercepted by some one—by one of those, perhaps, whom Mr. Nutt classes as his very "particular friends." Be this as it may, a misunderstanding between us has been the consequence, and our correspondence has ceased. I shall say little now, either of Mr. Nutt as an author, or of his friends who defend him. My purpose in addressing you is simply to state a few facts favorable to Mr. Nutt's system, which have come within my own experience, and which seem to me to invalidate the principal objections brought against it by your anonymous correspondent J. P. T. Nor should I have condescended to answer a person who seems afraid to be known in his attacks on an inoffensive individual, were it not that the Editor of the Mechanics' Magazine has in a manner identified himself with J. P. T., by the note which he has subjoined to one of his communications.*

First, then, as to "swarming from necessity or choice." I have two sets of collateral boxes, one stocked on the 24th, the other on the 28th of May last. The bees have filled the first with combs and honey entirely. One side box is full of combs, and partly full of honey. The bell-glass is about one third full of combs, and partly supplied by honey also; my bell-glasses will contain twice as much as the largest I have seen from Mr. Nutt. From this, it must be evident that my bees must have swarmed "from necessity," had I not prevented this by the "move" recommended by Mr. Nutt, or something else tantamount to it. That they did not *choose* to swarm is evident from the work they performed after an enlargement was granted them. The swarm in the second set of boxes has filled the centre box and the glass just the same as the other; added to which, each swarm has partly filled another box, and then returned to the colony. (See hereafter.)

Mr. Nutt's glass on the centre box is not an abandonment of "his so much lauded ventilating system," that glass being itself also ventilated.

The comparing Mr. Nutt's prevention of swarming to a farmer preventing his ewes having lambs is not good reasoning. If a farmer could make his ewes to produce mutton and wool without the butcher's knife, then the cases would be parallel; but Mr. Nutt's plan is to get the honey without killing the bees. The moment the bees become too numerous for the box where they are first located, they are permitted to enter another box that is empty; the full one has its contents removed, and again is replaced on the stool until wanted, and so on. How, then, can the comparison be borne out?

I do not know what Mr. Huish means by his bees being "very lively," when the thermometer fell 20° below freezing. My bees are never *very active* when the thermometer is 20° above freezing. I would also add, that I attribute my success in keeping bees, when many of my neighbors lose them, to the simple circumstance of mine being out of the influence of the sun during winter; in fact, my hives are for weeks, and even months together, as still as if no bees were in them.

In reference to *moving bees*, we pay no attention to it in this part of the country; we move them to suit our convenience, as in changing of residences, selling or exchanging hives, putting them out on the half, and so on—never supposing but what bees can find their way back to any place from whence they have once started; we always, when we do remove them, do so after they are quietly housed at night.

Your correspondent says, "Mr. Nutt has so mystified the description of his hive that no person in the world can understand it." Now mark this, sir: my boxes were all made with their appendages according to the directions and plates given in Mr. Nutt's Treatise, *since which* I have seen a set from Mr. Nutt, sent to a lady near Penzance, and I find that I have not mistaken him in any one point. So much, then, for your correspondent's acuteness of perception. Another striking proof of it is, that he cannot understand the size of the dividing tins to be inserted between the boxes, when preparing to take off a side box. Of what size should they be? Surely, long enough and wide enough to stop the communication between the two. Attend again to what he says of regulating the temperature: "After all the fuss, too, about thermometers, there is no mention made in this chapter, nor any part of the book, where they should be inserted into the hive." Why, into the ventilator, to be sure, which is a perforated tin tube placed there on purpose.

To show, further, how carelessly, as well as with what prejudice, your correspondent must have read Mr. Nutt's treatise, he calls a mere block, or door, if you please, a drawer in common with the feeder, which is a drawer. These block fronts I used this season to try the experiment of taking off a side box, in which I so far succeeded that I did not injure a single bee, that I could discover. I introduce the dividing tins carefully and slowly between the boxes, as directed by Mr. Nutt, although your correspondent says Mr. Nutt gives no such directions. There is no frame-work needed to support the combs: this I have proved over and over in cottage hives, and never even put a pint hrough the crown, as some persons do. I have proved it also in the boxes and glasses to my entire satisfaction. My bees, on being admitted into a side box, will take possession without "coaxing" at all. I take the box, clean it well out, rub it with a little honey, the smell of which will remove all other, if any existed, though I know not that it is at all needful; but we always prepare cottage hives to receive a swarm by rubbing it with something to make it grateful to them. I should think in about two or three hours after the communication was opened, in the three cases I tried, bees to the quantity of good swarms took possession of the boxes, and remained quietly to work as in the boxes they before occupied.

I do not recollect Mr. Nutt saying "he cannot himself, without great difficulty, take a box away from his own hive." I had no difficulty, danger, or accident to myself or to the bees, in two experiments tried this season—the boxes with the combs still remain for inspection. Your correspondent also says, in reference to Mr. Nutt's letting a swarm hang with a sheet before them until evening, that "my bees with such treatment would have fled away." A man I know in Breage told me this summer that he has frequently shook his bees after he had returned from Wheel Vor, a distance of three miles, after six o'clock in the evening, and on one occasion they swarmed so early as nine o'clock in the morning. The first swarm of my own, alluded to above, swarmed and settled in an apple-tree, after which a messenger was procured, and sent to me then two miles off. I went myself, and shook them in Mr. Nutt's box for the first time. The reason was I had the key of the room in my pocket, and my friends could not get at the box. The man's bees, above noticed, were left so long because his wife was afraid of them, and his dwelling was in a lonely place.

The above are facts that may be doubted, but cannot be disproved. Another season, I may, if you desire it, favor you with my further progress; or I may, in the mean time, with your permission, point out some other matters your correspondent has very much erred in.

George William Wood.

Germo, near Helston, Cornwall, Oct. 1, 1834.

* Not so; we only so far sided with our correspondent, as to say that his strictures had led us to think less favorably of Mr. Nutt's system and his book than we originally did, and that these charges had not been met as they might and ought to have been, if *unfounded*, by the two other correspondents who undertook Mr. Nutt's vindication, and who, we may add, are persons that must be able, if any body can, to vindicate it most effectually.—Ed. M. M.

Scythe Sneaths.—Mr. Silas Lamson of Cummington, has a great reputation for good scythe sneaths. He employs about fifteen hands, and makes nearly two hundred a day. He intends to manufacture fifty thousand a year, and the proceeds of his sale will not fall much short of $25,000 annually! This is but one specimen of Yankee thrift and industry.

CONVERSION OF SALT WATER INTO FRESH.—An important and completely successful experiment has been made by Mr. Wells, as to the conversion of sea water into a perfectly fresh and pure liquid, fit for every purpose of domestic use. The apparatus consists of a cast-iron cooking machine, about four feet in height, and the same in width, and contains ovens, roasting fires, pots, pans, kettles, &c., sufficient to dress a dinner for seventy or eighty men. The consumption of fuel is about two bushels in twenty-four hours; and by the internal application of the heated air, by means of tubes surrounding the various parts of the machine, roasting, boiling, and baking, are carried on with the utmost regularity and precision. Whilst the cooking is proceeding, the sea water is gradually supplied from a cask or tank, and passing into the interior of the machine, is there submitted to distillation. In its distilled state it flows into a pipe of cast iron, or of copper, tinned, which pipe is led over the bow of the vessel, and along the cut-water into the sea, and thence along the bottom of the vessel, till it returns into the hold, where a common stop-cock draws off the water. The grand improvement is the making the element in which the vessel floats the condenser of the altered liquid, which runs off at about the rate of a quart a minute, perfectly fit for drinking, washing, or any of the other purposes for which fresh water is employed. The patentee then filters it through charcoal, to restore the carbon which has been lost in the distilling. This invention will render the watering of ships unnecessary, and the room hitherto required to stow water may be used for goods.—[Literary Gazette.]

Would not the room required for the stowage of fuel to carry on the process be equal to that required for water?

HABITS OF SPIDERS.—M. Walckenact related before the Entomological Society of France, the following curious fact, which is given on the authority of Mr. Spence. Having placed a large full grown spider, of the species *Epeira diadema*, on a cane planted upright in the midst of a stream of waters, he saw it descend the cane several times, and remount when it had arrived at the surface of the water. Suddenly he altogether lost sight of it, but a few minutes afterwards, to his great astonishment, he perceived it quietly pursuing its own way on the other side of the stream. *Epeira* having spun two threads along the cane, had cut one of them, which, carried by the wind, had become attached to some object on the bank and so served the spider as a bridge across the water. Mr. Spence believes that spiders, when adult, always use similar means to cross water. M. le Pellitier de Saint Fargere also supported the opinion.—[L' Institute.]

SALTING BUTTER.—The quantity of salt for butter that is not to be eaten for several months after salting, should not be less than half an ounce of salt, mixed with 2 drachms of sugar and two drachms of nitre, to sixteen ounces of butter. The sugar improves the taste, and the nitre gives the butter a better color, while both of them act with the salt in preserving the butter from rancidity. If the salt is not minutely mixed into the butter, that on which it rests will have a yellow or brownish color, while the rest will be of a white color, which, in dairy language, is termed "pyety butter," that brings an inferior price. But although the butter has to be kneaded among the water, and the salt well mixed into it, care must be taken not to bake or knead it too much, otherwise it will become tough and gluey.—[Quar. Journal.]

[*From the Baltimore American.*]

The performances of the Ice boat during the past week have not only been completely successful, but have far exceeded any expectations which had been formed of her efficiency. Our eastern friends, whose harbors have all been blocked up by ice, will scarcely credit us, when we tell them that we have a steamboat which has not ceased operations for a single day since the late cold weather set in, but has forced a passage through the ice—thick and hard as it has been—with one or more vessels in tow. The Relief was built by gentlemen of our city, of great practical experience, for the express purpose of keeping open a passage into and out of the harbor in the winter season, and it is no faint praise to say that they have planned a boat which has fully answered this object, and whose operations have been attended with a success which has never yet been attained elsewhere.

The most remarkable performance of the Relief was on Friday last, after we had had a week of the most intensely cold weather experienced here for many years. About noon, she started from the harbour the brig Falcon in tow, and to the astonishment of all who witnessed it, made her way through ice a foot thick and of a flinty hardness. Every inch of her progress was thus impeded until she had traversed the whole length of the Patapsco, and reached the broad expanse of the Chesapeake Bay. Having placed the Falcon in a position clear of ice, from whence she could go to sea without difficulty, the Relief proceeded to Annapolis, where her entrance into the latter harbor was attended with obstacles of the same character that had been surmounted in leaving Baltimore. Her appearance there, we learn, excited no little astonishment, as it was supposed that the harbor was too firmly locked in ice to be opened by any human device. On the following day, Saturday, the Relief started from Annapolis,—making a passage as she came out for the steamboat Columbus, bound to Norfolk,—and reached Baltimore on the same night. Yesterday morning she started again for Annapolis, taking in tow the brig Ida, for Boston, brig Solon, and schooners Empire and Othello, for New York.

We may well say, therefore, that after the experience of the past week there can be no doubt of the ability to keep open the harbor of Baltimore in the severest winters, and that vessels may enter or depart without the hindrance experienced during the winter season in more northern ports. The achievement of this triumph is of much importance to the trade of our port, and gives to our Railroad, which is also independent of the seasons, great additional value.

For the information of persons at a distance, who may be curious on the subject, we will state that the Relief is a steamboat the model of whose bow has a close resemblance to the bowl of a table spoon. When she is propelled forward, the ice is not thrown before her, as it would be by an ordinary vessel, but passes under her bows and is broken. Her paddle wheels are of wood and iron, and some idea of their strength and adaptation to this peculiar service may be formed when we state that each wheel has in it six tons of Iron.

MISCELLANY.

Among new works advertised in London as *in the Press*, is the Journal of *Mrs. Butler*, late Miss Kemble.

"THERE IS TIME ENOUGH."

This is one of the most mischievous sentences in the English language. Not that it is bad in itself—for it is strictly true, as we intend to show presently. But its meaning is sadly perverted, and what was meant for good, becomes the occasion of evil.

Many a good thing might have been done had it been begun in season, but because there was time enough it was let alone, and let alone, and so not started until too late, or never moved at all.

But there is such a thing as bringing good out of evil. The bee extracts honey, as sweet, if not as abundant, from the thistle, as from the rose. And he who would profit by studying human nature, and watching divine providence, may learn wisdom from his past errors, and turn over his misfortune to some good account.

The wisest man in ancient days, (and we believe he was fully as wise as people commonly are at present,)—the wisest man of ancient days has given us to understand that there is *a time* for every thing under the sun. *A time for laughter and for tears, for sorrow and for joy.* A time for business, a time fro recreation, and a time for rest, but he does not say a word about leisure time ,or time for idleness. He speaks too of a time to die, leaving us to infer, as we may very naturally, that He, *who made the sun to rule the day*, the moon and stars to govern the night, has given us *time enough*, just time enough, and none to spare, to perform all our duties, and to enjoy every rational pleasure—to make the world better for our having lived in it—and to become better fitted ourselves, for "Another and a better world."

There is *time enough*, says the schoolboy,—whose time runs out, and he goes half fitted to the counting room, or enters half fitted, at college.

Time enough,—thinks many a young man, if he does not say so, to commence habits of frugality and economy, and thus provide for future wealth—but the time never, never comes; and and he, to use a homely phrase of Dr. Franklin's, "scratches a poor man's head as long as he lives."

How many designs have we formed, of doing this and that good thing, which fell through, not because we had little time; but because we had time enough, and so wasted one hour after another till the time had passed.

Time enough to work, says the idler, and spendthrift; but his clothes wear out before he finds time to earn new ones; and his pockets are emptied, and he has no time to replenish them.

Franklin has a homely saying to this effect,—that he who looses an hour in the morning, must run all day, and 'tis a wonder if he overtakes his business before night. So, if any one finds himself pinched for time, it is likely he has thrown away an hour, when he thought he had time enough and a little to spare.

Time enough—say we, when in a serious mood, we resolve to be more dilligent, more systematic, more punctual; when we resolve upon any *reform*.

We do not mean to procrastinate; but while we muse the moment passes, it is irrecoverably lost.

Do you say we knew all this before.

No doubt of it. Yet we are apt to think there is not only *time enough*, but some to spare. But this is an error and should be corrected.

The different length of different lives is nothing against our position, that life is just long enough. The oldest person has enough of duty and enough of pleasure too: if he lives aright, to occupy his three score years and ten—while he whose sun goes down at noon, has time enough, if he will but improve it, to make his life here a blessing to others, and that hereafter blessed and glorious to himself.

——"That life alone is long,
Which answers life's great end."

The Ex-Pugilistic M. P.—Mr. Gully, M. P. for Pontefract, who attended the dinner given to the Earl of Durham at Newcastle, is the largest proprietor of the famous Hetton colliery, in the county of Durham Mr. Gully is said to have invested upwards of £160,000 in that very extensive coal mine.

THE DEEPEST MINE IN GREAT BRITAIN.—The shaft at present sinking at Monkwearmouth Colliery, near Sunderland, has attained a considerably greater depth than any mine in Great Britain (or estimating its depth from the level of the sea, than any in the world). Pearce's shaft at the Consolidated Mines in Cornwall was, till lately, the deepest in the island, being about 1470 feet in perpendicular depth, of which 1150 feet are below the surface of the sea. The bottom of Woolf's shaft (also at the Consolidated Mines) is 1230 feet below the sea; but its total depth is less than that of Pearce's shaft. The bottom of the Monkwearmouth shaft is already upwards of 1500 feet below high water mark, and 1600 feet below the surface of the ground. It was commenced in May 1830. The upper part of the shaft passes through the lower magnesian limestone strata which overlap the south-eastern district of the Great Newcastle Coal-field, and which, including a stratum of "free-stone sand" at the bottom of the limestone, extended at Monkwearmouth to the thickness of 330 feet, and discharged towards the bottom of the strata the prodigious quantity of 3000 gallons of water per minute,—for the raising of which into an off-take draft, a double acting steam engine, working with a power of from 180 to 200 horses was found necessary. The first unequivocal stratum of the coal formation, viz. a bed of coal 1 1-2 inches thick, was not reached till August 1831 (being about 344 feet below the surface, after which the tremendous influx of water which had so long impeded the sinking operations was "stopped back" by a cylindrical "metal tubbing" or casing, fitted (in a series of small portions) to the shaft, and extending from below the above bed of coal to within 26 yards of the surface. The sinking now proceeded with spirit—still no valuable bed of coal was reached, although the shaft had passed considerably above 600 feet into the coal measures, and much deeper than had hitherto been found requisite for reaching some of the known seams. It became evident that the miners were in unknown ground. A new "feeder of water" was encountered at the great debth of 1000 feet. requiring fresh pumps and a fresh outlay of money The prospects of the owners became unpromising in the eyes of most men, and were denounced as hopeless by many of the coal-viewers! Coal-viewing, however, had as yet been limited to some 200 or 220 fathoms; and the views of the Messrs. Pemberton (the enterprising owners of this colliery) were not to be bounded by such ordinary depths; they considered rightly that the thickness of the coal formation might be vastly greater where protected by the superincumbent limestone, than where exposed to those denudations which in the neighborhood of the "rise" collieries had probably swept away the strata through which their own shaft had hitherto been sunk; that they were therefore, justified in anticipating the larger and known seams at greater depths; and that, in case these larger seams had (as was intimated) been split into smaller strata, the same causes which in other places had produced their subdivision might, at Monkwearmouth, have effected their junction. They continued, therefore, their sinking, and in October last reached a seam of considerable value and thickness, at the depth of 1578 feet below the surface; and presuming that this newly discovered seam was identified with the Bensham seam of the Tyne (or Maudlin seam of the Wear), they are rapidly deepening their shaft, in anticipation of reaching the Hutton or most valuable seam at no distant period, but which (if their anticipations are well founded) will be found at a depth approaching 300 fathoms from the surface!! In the mean time, however, workings have very recently commenced in the supposed Bensham seam. A party of scientific gentlemen descended into these workings on Saturday last, and, aided by every facility and assistance which could be afforded to them by the Messrs. Pemberton, made several barometric and thermometric observations, the detail of which will be *deeply* interesting to many of our readers. A barometer at the top of the shaft (87 feet above high water mark) stood at 30.518, its attached thermometer (Fahrenheit) being 53. On being carried down to the new workings (1584 feet below the top) it stood at 32.280, and in all probability higher than ever before seen by human eye; the attached thermometer being 58. Four workings or drifts had been commenced in the coal; the longest of them, being that "to the dip," 22 yards in length and nearly two in breadth—to the end of which the current of fresh air for ventilating the mine was diverted (and from which the pitmen employed in its excavation had just departed)—was selected for the following thermometric observations. Temperature of the current of air near the entrance of the drift, 62 (Fahrenheit); near the end of the drift, 63; close to the face or extremity of the drift, and beyond the current of air, 68. A piece of coal was hewn from the face; and two thermometers placed in the spot just before occupied by the coal (their bulbs being instantly covered with coal dust) rose to 71. A small pool of water was standing at the end of the drift. Temperature of this water at eleven o'clock, 70; three hours later, 69 2-2. A register thermometer was buried 18 inches deep below the floor, and about 10 yards from the entrance of the drift; forty minutes afterwards its maximum temperature was 67. Another register thermometer was similarly buried near the end of the drift, and after a similar period indicated a maximum temperature of 70. It was then placed in a deeper hole and covered with small coal; some water oozed out of the side of this hole to the depth of 6 or 8 inches above the thermometer, which, upon being examined after a sufficient interval of time, indicated a temperature 71 1-2. A stream of gas bubbles (igniting with the flame of a candle) issued through the water collected in this hole; the bulbs of two very sensible thermometers were immersed under water in this stream of gas, and indicated a temperature constantly varying between 71 5 and 72·6. A thermometer was lowered to the bottom of a hole drilled to the depth of 2 1-2 feet into the floor of another of the workings, and the atmospheric air excluded from it by a tight stopping of clay; this thermometer being raised after the lapse of forty-eight hours, stood 71·2. The above observations will accord with the prevailing (and certainly well grounded) opinion, that the temperature of the earth increases with the depth from the surface. It must not, however, be forgotten that causes may be assigned for an increase of temperature in this and other coal mines, independently of the presumed subterranean heat. Those who are familiar with coal mines must have frequently witnessed the effects of the enormous pressure of the superincumbent strata; and a weight of 25,000 to 30,000 tons, which had lately reposed upon the coal hitherto occupying the drift above described, had suddenly been transferred to the coal situate on the sides of this drift. Hence those constant indications of tremendous pressure—the cracking of the sides and roof, and "heaving of the floor," and the crumbling of their materials, furnishing admission of air and water to innumerable fragments of shale, coal, and pyrites—circumstances which are abundantly calculated to occasion an increase of temperature, both by mechanical compression and chemical decomposition, although wholly inadequate, as we conceive, to the generation of the temperature recorded on Saturday last; and the presence and lights of the pitmen were obviously inoperative in producing the effects remarked. Other experiments, however, in the prosecution of these inquiries, are, with the obliging permission of the owners, contemplated at Monkwearmouth Colliery; and amongst the minor advantages arising from their magnificent undertaking, will doubtless be the solution of any remaining doubts of the existence of considerable subterranean heat at accessible depths, beneath the surface of the earth.—[Durham Adv.]

REVENUES OF THE GERMAN STATES.—The second part of the fifth volume of the work entitled "Archives of the New Legislation of all the States of Germany," published by M. Alex. Muller and others, contains an interesting account of the actual state of the finances of Austria, Prussia, and the other German States; from whence it results that in the empire of Austria, the real revenue of the State amounts to 295,400,000 florins, and the debts of the State to 793,360,000 florins. The new Budget of Prussia for the years 1822—1834, according to the "Bulletin of the Laws" of 1832, No. 6, is fixed at 51,287,000 dollars. The debt of the State amounts to 170,000,000 dollars.

The revenues and debts of the other States are calculated in French francs.

	Revenue in francs.	Debts.
Bavaria	69,733,000	265,900,000
Wurtemberg	20,000,000	60,000,000
Hanover	27,000,000	64,000,000
Saxony	28,000,000	70,000,000
Grand Duchy of Baden	20,000,000	39,000,000
Hesse	17,600,000	27,000,000
Electorate of Hesse	11,000,000	5,000,000
Grand Duchy of Saxe Weimar	4,913,000	16,291,000
Meck.-Schwerin	6,000,000	20,500,000
Meck.-Strelitz	1,500,000	3,000,000
Holst.-Oldenb	3,800,000	
Duchy of Nassau	6,000,000	9,500,000
Brunswick	6,300,000	8,000,000
Saxe Coburg-Gotha	2,500,000	11,600,000
Saxe Meiningen	1,939,000	8,000,000
Saxe-Altenburg	1,526,000	3,600,000
Anhalt-Dessau	1,400,000	1,600,000
Anhalt-Dembourgh	1,100,000	1,700,000
Anhalt-Kotben	630,000	3,103,000
Principality of Reuss-Greiz	362,000	517,000
Reuss-Schleitz	336,000	1,810,000
Reuss-Lobenstein	621,000	
Schwarzbourg-Rud	800,000	600,000
Schwarzbourg-Son	600,000	340,000
Lippe-Detmold	1,267,000	1,500,000
Lippe Schumbourg	556,000	1,034,000
Waldeck	4,034,000	3,103,000
Hohenzollern-Sig	300,000	2,600,000
Hohenzollern-Hec	310,000	700,000
Lichstentein	50,000	
Landgravate of Hesse-Hombourg	400,000	1,164,000
City of Frankfort	1,634,000	17,000,000
Bremen	1,614,000	7,800,000
Hamburg	5,600,000	40,000,000
Lubeck	1,034,000	2,000,000

It results from the above table, that in Austria each individual pays 13 1-2f to cover the debt of the State; in Prussia, 14f; in Bavaria, 17 1-2f; in Wurtemberg, 12 1-2f; in Hanover, 16f; in Saxony, 18 2-3f; in the Grand Duchy of Baden, 16 2-3f; in that of Darmstadt, 23 1-3f; in the Electorate of Hesse, 16 1-2f; and in the other small states, from 11 1,2f to 23f. In France each individual pays, to cover the public debt, 33f per annum; and in England, 49f.

His Majesty has conferred a baronetcy on Feliz Booth, as a mark of approbation at the munificent sum advanced by that gentleman towards defraying the cost of the last expedition of Captain Ross to the polar regions. Mr. Booth, we understand, declined for a long time to accept this mark of distinction, and we believe the honor has been at last voluntarily conferred upon him by the government.

The champagne vintage of the present year is as follows:—Verzenay, 3,000 casks, Verzy and Villers Malmsey 1,500, Relly, Chezney, and Ludo, 1,000, Bowzy 1,000, Ambonnay 1,000, Ay 10,000, Mareuil and Aonay 3,000, Haut, Villiers, Dizy, and Cumiers 4,000, Epernay 4,000, Pierny 4,000, Moussy 2,500, Chouly 1,500, Cramant 2,000, Avize 8,000, Oger and Mesnil 16,000, Vertus 2,000; total 64,500 casks, containing 220 bottles each, making in all 14,190,000 bottles.—According to the estimate of the number of bottles which can be procured at the different manufactories, it appears that next year, when this vintage comes to be bottled off, there will be a deficiency to the number of 3,390,000, The manufactory of M. de Poilly can furnish 2,000,000, that of M. Daube 1,500,000, that of M. de Coloret 1,200,000. that of M. de Violaine, 1,800,000, that of Messrs. Pallier and Calegois 600 000.—The Auzin factory 400,000, two others in the North 600,000, the four Lorraine factories 2,500,000, and that of Croyeny 200,000; total, 10,800,000. The number required is 14,190,000; deficiency 3,390,000.—[Paris Advertiser.]

Liberty a Plant.—During the progress of a political meeting held in the town of Cambridge, it so happened that the late Dr. Mansel, then public orator of the University of Cambridge, but afterwards master of Trinity College and Bishop of Bristol, came to the place of meeting just as Musgrave, the well known political tailor of his day, was in the midst of a most *pathetic* oration, and emphatically repeating, "Liberty, liberty, gentlemen—" He paused,—"Liberty is a *plant*—" "So is a *cabbage!*" exclaimed the caustic Mansel, before Murgrave had time to repeat his sentence, with so happy an allusion to the trade of a tailor, that he was silenced amidst roars of laughter.

NEW-YORK AMERICAN.

JANUARY 10—16, 1835.

LITERARY NOTICES.

THE NEW ENGLAND MAGAZINE, for January.—Boston.—It was a bold and difficult enterprize for untried powers, to assume the editorship of this magazine, which under its founders had won its way to the highest place among American monthlies. We wish their boldness may be rewarded with success, but as yet must ascribe to the Magazine the lament,

Non sum qualis eram.

THE WESTMINSTER REVIEW, No. VII., being the 2d number of Foster's republication. New York: F. FOSTER.—The Westminster rather affects American subjects, and particularly American principles—and aims, we believe, more than any other European periodical, to acquire authority for its opinions, by referring to our example and practices. The first paper in this number is on the controversy concerning the Bank of the United States, in which it takes the side of "the brave old man" who waged, and is still waging, war against that institution, with as little perception of, or regard to, the real merits of the questions involved in the discussion, as any other headlong and passionate old man, intent upon gratifying personal resentments at any rate, would be likely to have.

As compared with either the Quarterly or Edinburgh, this whole number of the Westminster is feeble and uninteresting. From an article on the English language, we make two extracts—curious in their way.

Dr. Johnson was the first who culled from received authors some of those words to which they had given their approbation. The words comprised in his dictionary may truly be called a mere selection from those which form the language of England, when there are found in Shakspeare alone upwards of 1000 words which he rejected [*Chalmer's Apology for the Believers &c.* p. 210]. and the Rev. Gilbert Wakefield, in a letter to Mr. Fox, stated that he had collected from Milton upwards of '500 solid and nervous words' not in that dictionary. By the way, this may account in some measure for the inability of foreigners to appreciate, or even understand, the great national dramatist and poet. Mr. Todd has added 'several thousand words' to the number given by Johnson;—not new coinages of his own, but sterling English words;—many of them contained in writers to whose works Johnson must have had access, but which his fastidiousness induced him to discard. Mr. Chalmers, in his Abridgement of Todd's Johnson, has ventured to call it 'a complete glossary of the early English writers; but very erroneously. Milton's Areopagitica alone has a considerable number of words, there appear 32, not in the Dictionary; of which there are at least a dozen good words, some of them in daily use now, such as the adjective 'Eutopian.' A calculation has since been made by a late accurate philologist, that there are at least 13,000 words in common use in England, which do not appear in any dictionary of the language. Collections of many of these, amounting already to at least 5000, have been made in local vocabularies; and their derivations, in many instances, have been traced from those languages of which they once formed parts, and in the composition of which they were used as perfectly correct.

* * * *

Another point for examination is the manner in which many of the verbs are used. Learn me,—for Teach me. To learn is the English of the Saxon verb Laeran, which implied '*docere*' as well as '*discere*' and has been employed accordingly by some of the best writers. It will be found in the 25th and 119th Psalms in the Common Prayer Book. In Richard II, the Bishop of Carlile says, 'Then true noblesse would learn him forbearance from so foul a wrong;' and the same phrase occurs in The Tempest, As You Like It, and elsewhere.

To 'remember' another of anything, has also many good authorities in its favor, though it is now banished from polite discourse. Richard II's Queen objects to her lady telling tales of joy to her, because it will 'remember her the more of sorrow.' In King John, Constance says that grief 'remembers her' of Arthur. In the second part of Henry IV, Worcester 'remembers' the King, *who* were his first friends. And, nearer the present times, Richardson has the word in the same sense, in the 3d volume of Sir Charles Grandison, p. 157 of the 7th edition.

To 'fetch' a walk has also, though used only by the untaught in the present day, been approved by high authorities. By Milton,

When evening gray does rise, I fetch my round
Over the mount, and all this hallowed ground.

In Cymbeline, the Queen says, 'I'll fetch a turn about the garden,' &c. Acts, ch. 18, v. 13.—'And from thence we fetched a compass round,' &c.

To 'ruinate,' though used by Shakspeare and many authors of his age, and, still later, by Lord Bacon,—'Philip and Nabis were already ruinated,'—is among the proscribed verbs; as are various inflections of others in general usage, such as the following,—'It snew,' for It snowed; which is particularly used in Norfolk and Suffolk, where the common people say, it *snew* and it *friz*. Holinshed, under the year 1583, describing the performance of a tragedy, says that among other devices, it '*snew* an artificial kind of snow.' Dr. Wallis, in his English Grammar, published in 1653, mentions that *snew* was used as the perfect tense of the verb to snow, 'sed et utrobique, *snowed*.' Chaucer has 'it *snewed*.'

The next No. of this republication will be issued in about ten days, and will furnish, we are glad to find, the last London Quarterly, which has some capital papers, from one of which a long and interesting article will be found in another column.

PINNOCK'S IMPROVED EDITION OF GOLDSMITH'S HISTORY OF ENGLAND, with a continuation to the year 1832. First American from the 23d English edition. 1 vol. Philadelphia: Key & Biddle.—This is well got up, with a variety of wood cuts, explanatory notes, and with questions for examination at the end of each section. Yet we must say, as an American schoolbook, we prefer the *English History* we had occasion to notice some weeks ago by the author of "American Popular Lessons." The style and narrative of Goldsmith are more striking; but these are almost all lavished upon dissensions civil broils and bloodshed, while little attention is given to moral character and institutions, or to domestic and social history. In these particulars, which lead the young mind to consider other national characteristics than proneness to, and prowess in war, valuable, we consider that the "English History" above referred to, is entitled to the preference we have expressed.

MUSEUM OF FOREIGN LITERATURE, &c., for January; E. LITTELL, Philad.—This periodical, than which none affords more, or more varied reading, appears in an enlarged form, and henceforth will be under the direction, as to the selections, of the editor of that capital and cheap work, *Waldie's Library*. There is a good plate in this number of our old friend *Grant Thorburn*, which, if not very like as to the face, is unmistakeable as to the feet. The literary contents are of the best of all the foreign magazines.

From the latest London Quarterly, we make the following extract:

PERSONAL HISTORY OF LOUIS PHILIPPE.

The journal begins with the entrance of the young Duke de Chartres (the present King Louis Philippe) into the Jacobin club, an event of considerable importance in a public view, as marking his father's adhesion to the principles of that society, and which was also the occasion of serious family dissensions. The Jacobins, we find, were so much pleased at seeing the Duke de Chartres among them, that they presented him a formal address, of which the first sentence is curious:—'Sir, we congratulate ourselves! should we not also congratulate you? You have been our prince,—you are now our colleague,' &c.' But that which was a matter of congratulation to the Jacobins was a source of deep affliction to his amiable and excellent mother, and became the immediate cause of an open rupture between her and Madame de Genlis, by whose counsels that princess believed that her son had taken this unhappy and degrading step. Madame de Genlis, in her Memoirs, attributes it solely to the Duke of Orleans himself; but it is, we think, clear that she must share the responsibility. We have the young Duke's evidence, that his father only approved his own proposition; and we shall see, as we proceed, that this too docile and over affectionate pupil would never have thought of making such a proposition without Madame de Genlis's previous concurrence, *her* husband, M. de Sillery, proposed him,—*her* personal friends and the attendants whom *she* had placed about him all became members also. When in a year or two after, she, with her niece and Pamela, accompanied Mad'lle. d'Orleans to England, they designated themselves the four Jacobin emigrants. In short, it is clear that she countenanced, and probably advised, her pupil's entry into the Jacobin club; which, however, as she justly observes, had not at this period attained its subsequent ferocity and infamy. There is another circumstance in this affair that corroborates the opinion that the plunges of the Duke of Orleans into the successive depths of democracy were chiefly prompted by moral cowardice—the Duke de Chartres became Jacobin at the moment of that violent excitement which followed the duel of Messrs. de Castries and Lameth; but the father himself did not become a member of the club till the commotion occasioned by the flight of the King, when, not without some demur, he was admitted. Again, it was amidst the massacre of the 10th of August that he solicited the change of his name to *Egalité*. We say *moral* cowardice, for he showed more than once, and particularly at his last hour, personal firmness. We are tempted to quote from the little known relation of an eyewitness the account of his last hours. On the 6th of November, 1793, he was brought before the revolutionary tribunal, and, after a mock trial, condemned, on a series of charges, of all of which he was notoriously guiltless. He treated the dreadful mockery with contempt, and begged, as an only favor, that the sentence might be executed without delay; the bloody indulgence was granted, and he was led, at four o'clock, when the daylight was almost failing, from the court to the scaffold. 'I confess,' says the editor of the Orleans correspondence,' 'I had the barbarous curiosity to see him go to execution; I took my station opposite his palace, that I might observe the effect which, at his last moments, these scenes of former splendor and enjoyment might have on him. The crowd was immense, and aggravated, by its reproaches and insults, the agony of the sufferer. The fatal cart advanced at so slow a pace, that it seemed as if they were endeavoring to prolong his torments. There were many other victims in the same cart; *they* were all bent double, pale and stupified by horror. Orleans alone—a striking contrast—stood upright, his head elevated, his countenance full of its natural color, with all the firmness of innocence. By a refinement of cruelty, the cart was stopped at the gate of his palace; I saw him run his eyes over the building with the tranquil air of a master, who should be examining whether it required any additional ornament or repair. This air was, no doubt, studied and put on. I, as well as everybody else, could see that it was; it was even said, that he had prepared himself for it by wine; but, with all that, I was astonished. I am still astonished to think how such a man as Orleans could, by any means, have subdued his natural character, and worked himself up to such an appearance of courage and tranquility.' We return from this

digression to observe, that as to the rupture between the Duchess of Orleans and Madame de Genlis, the latter in her memoirs, does tardy and rather reluctant, but yet complete, justice to the former. The cause, says she, of the duchess's coldness to me was evidently a difference of opinion on the politics of the day; and I am now ready to acknowledge that her fears, which at the time appeared to me so exaggerated, and even so unjust, were but too well founded. She did not permit her imagination to lead her astray—she did not abandon herself to romantic visions—*her* judgment, alas! was better than mine. With these preliminary observations on the state of the family, which will tend to explain some things which might otherwise obscure, we proceed to the journal itself:

We have only room to day for some extracts from this—

"'*Journal of Louis Philippe, Duke de Chartres.*'—Oct. 23, 1790.—I dined at Mousseaux—next day my father having approved my anxious wishes to become a member of the Jacobin Club, M. de Sillery proposed me on Friday, Nov. 2.—I was yesterday admitted to the Jacobins, and much applauded. I returned thanks for the kind reception that they were so good as to give me, and I assured them that I should never deviate from the sacred duties of a good patriot and a good citizen. Paris, Nov. 9.—Left Chateauneuf at eleven at night, and arrived at Bellchasse at ten next day. I got on horseback at Angerville, nine leagues off; it was still dark, and I rode to Paris. In the evening I attended the Jacobins. They appointed me censor. As the hall is much too small to contain the friends of the constitution (the formal title of the club which derived its popular name from meeting at the convent of the Jacobins) whose members increase daily, a committee was named to look out for another place. They were discussing the King's household troops. M. de Miraubal, a young man, spoke remarknbly well. I learned that I had been named one of the deputation to convey to the National Assembly the proposition relative to the Tennis Court. Nov. 10.—Yesterday my father sent for me, received me most kindly, and gave me fifty louis, of which I gave my brother ten. My father desired me to call on Madame de Lamballe, I went directly; and from her to the Assembly, and from that, with my father's approbation, to dine with M. Bonne-Carrere, who had been spokesman of the deputation to the Assembly.— He had invited the whole deputation and several members of the Assembly. The dinner was very gay, very patriotic, and very decent. Nov. 16.—At the Jacobins. I rose to speak, and said that I had had the honor of being admitted last year (though under age) into the Philanthrophic Society. This society was in the habit of distributing 400.' per annum; but this year the funds had fallen off by one half, because several very affluent persons had retired under pretence that the revolution prevents their contributing four louis a year. In this they have two objects—the first to discredit the revolution for having destroyed so good an institution; and secondly, to make it enemies of lal the poor whose pensions should be thus stopped, by saying, it is the revolution deprives you of your bread. I said I thought that it was worthy of the club to support the Philanthrophic Society, and I invited all who could afford four louis a year to belong to it, and those who could not, to contribute what they could afford. I was much applauded, and, on the motion of M. Faydel, a subscription which had been raised a month ago, for a poor man who had refused it, was transferred to the Philanthrophic Society.—Nov. 19. This evening at the play to see (Voltaire's) Brutus, the audience made many allusions. When Brutus says, "Give me, ye Gods, death rather than slavery," the house rang with shouts of applause—great waving of hats. It was magnificent. Another line ended with these words. "*free and without a king.*" Some applause was heard, in which neither I nor any one in our box joined. Then there was a cry of God save the King, but it being observed that this cry was unconstitutional, they substituted the tripple cry, which sounds so sweet in patriot ears—God save the nation, the law, and the King and liberty for ever. It was clear from all that passed that the patriots had a great majority over the aristocrats; three or four of these latter would have applauded some congenial allusions, but they were reduced to silence. 8th Jan. In the morning to the assembly—at six in the evening to the Jacobins. M. de Noailles presented a work on the revolution by Mr. Joseph Towers, in answer to Mr. Burke. He praised it highly, and proposed that I should be appointed to translate it. This proposition was adopted with great applause. I, like a blockhead, consented, but expressing my fear that I should not fulfil their expectations, I returned home at a quarter past seven. At night my father told me that he did not approve of it, and that I must excuse myself to the Jacobins on Sunday. June 27th. The great events which have occurred have prevented my continuing this journal. Thursday, the 23d, I attended at the head of the regiment, the procession of the Holy Sacrament. I had been required by the municipality to double the guard, to stop all carriages, and to employ the best energies of the brave patriots that I commanded to maintain the public peace. At noon I had brought back the regiment, but with orders not to unboot or unsaddle. I asked Messrs. Dubois, D'Albis, Jacquemin, and Phillippe, to dinner. They brought us word that the people had collected in a mob and were about to hang two priests. I ran immediately to the place—I came to the door of a tavern, where I found ten or twelve national guards, the mayor, the town clerk, and a great many people, crying they have violated the law; they must be hanged *á la lanterne*. I asked the mayor what all this meant, and what it was all about. He replied,—it is an old priest (that is a priest who had not taken the new oaths) and his father, who have escaped into this house; the people pretend that they have insulted M. Buisson, a priest, who has taken the civic oath, and who was carrying the holy sacrament, and I can no longer restrain them. I have sent for a carriage to convey them away. Have the goodness to send for two dragoons to escort them. I did so immediately. There was the Mayor motionless before the door, and not opening his mouth. I therefore addressed some of the hottest of the mob, and endeavored to explain how horrible it would be to hang men without trial; that moreover they would be doing the work of the executioner, which they considered infamous; that there were judges, whose duty it was to deal with these men. The mob answered that the judges were aristocrats, and that they did not punish the guilty. I replied, that's your own fault, as they are elected by yourselves; but you must not take the law into your own hands. Upon this there was a great confusion; at last one voice cried—we will spare them for the sake of M. de Chartres. Yes, yes, yes, cried the people; he is a good patriot; he edified us all this morning [by having attended the procession of the constitutional priest.] Bring them out we shall do them no harm. I said, do you promise me? Yes, yes, we shall do them no harm. I went up to the room where the unhappy men were, and asked them if they would trust themselves to me—they said ye . I exhorted the people not to forget what they had promised. They cried out again,—be easy, they shall receive no harm. I called to the driver to bring up the carriage; upon which the crowd cried out, no carriage; on foot, on foot, that we may have the pleasure of hooting them, and expelling them ignominiously from the town. Well, I said, on foot, be it so, 'tis the same thing to me, for you are too honest to forfeit your word.—We set out amidst hisses and a torrent of abuse. I gave my arm to one of the men, and the Mayor was on the other side. Not thinking at the moment, I took the direction towards Paris. All the people followed, singing the song of the Champ de Mars, and making a dreadful uproar. One man ran up crying *á la lanterne* with the rascals.—He narrowly escaped being hoisted up himself for saying so, because, said the people, we have promised M. de Chartres, and we will keep our word. We passed a little wooden bridge of a few planks without rails: there the mob cried to throw them into the river, and endeavoured, by putting sticks across, to trip them up into the water. I again reminded them of their promise, and they became quiet. The crowd was still increasing. It is but justice to the people of Vendome to say that they kept their word, and tried to induce the peasants to do no violence to the men. Seeing, however, that if I had continued my march some misfortune must inevitably occur, I cried, we must take them to prison; and then all the people cried, to prison, to prison.—Some voices cried, they must ask pardon of God, and thank M. de Chartres for their lives. That was soon done, and we set out for the prison.—As we went along, one man came forward with a gun, and said to us stand out of the way while I fire on them. Believing that he was really about to fire, I rushed forward in front of my men, saying, you shall kill me first. As the man was well dressed, M. Pieyre said to him, but how can you act so. I was only joking, says the man; my gun is not charged. We again continued our way. On arriving at the prison, there was a great crowd assembled. The dragoons were mounted by M. de Lagondie's orders.—I ordered them to dismount, saying, that the people had promised me, and that I needed no help but their word. The two men were lodged in the prison. When they were there, the people wanted to attack the Oratoire (a religious house), the superior of which has not taken the oath, and whose church was the resort of the refractory [*those who did not approve of the new constitution of the clergy*], and those whose children had not attended the procession—in short, of the aristocrats. I observed, that that was not the way to proceed; that they ought to request the Mayor to suggest to the superior of the Oratoire that they were displeased at seeing his church filled with the refractory. They answered, a fig for the Mayor—you may do it. I answered that I was ready to accompany the Mayor. I did so. The superior was very obstinate: he would not yield at that time, but he went off next morning. After dinner I went to the municipality, and stayed while they were drawing up the account of what had happened. I went again next day and signed it—3d August. Happy day, I have saved a man's life, or rather have contributed to save it. This evening, after having read a little of Pope, Matastasio, and Emile, I went to bathe. Edward and I were dressing ourselves, when I heard the cry of help, help! I am drowning? I ran immediately to the cry, as did Edward, who was farther off. I came first, and could only see the the tops of the person's fingers; I laid hold of that hand, which seized mine with indescribable strength, and by the way in which he held me, would have drowned me, if Edward had not come up and seized one of his legs, which deprived him of the power of jumping on me. We then got him ashore. He could scarcely speak; he expressed great gratitude to me, as well as to Edward. I go to bed happy."

At seventeen, this Journal, we repeat, is not discreditable to any man, be he Prince or Jacobin, or both.

SUMMARY.

The Legislature of Massachusetts met at Boston on Wednesday last. *Benjamin T. Pickman*, of Suffolk, was chosen President of the Senate by 30 out of 32 votes, and on the second ballot, *Julius S. Rockwell* was chosen Speaker of the House by 362 out of 504 votes.

LARGE CARGO.—The British ship Adam Lodge, Captain Page, cleared from Charleston on the 2d instant with a cargo of 1725 bales of cotton—65 tierces of rice—870 barrels of tar, &c.—valued at $94,200 59.

The keeper of the Montreal jail, recently detected in some sausages brought to the prison by the brother of a condemned convict named Lane, *six small files*, not intended certainly for internal consumption.

The wife of Mr. David Avery, of Westminster, Vt. has presented her husband with five children within fifteen months!

Abiza Snow, of Brunswick, Me. was presented by his wife on Sunday last with three boys, weighing 21 lbs. all well at last dates.

A very important movement has been recently made among the Cherokees in Georgia, the particulars of which are given in the Southern Recorder. On the 27th November, a Council of the Nation, composed of the Chiefs and Head men who are opposed to State jurisdiction, and in favor of removing to another country, was held at Running Waters. Elias Boudinot, who is, we believe, the most influential man among the Cherokees, presided. The Council declared it to be their unanimous opinion,—and a most sound and wise opinion it unquestionably is,—that their people "cannot exist amidst a white population, subject to laws which they have no hand in making, and which they do not understand." Nor could they long exist even with entire political independence, where they are surrounded by whites, and consequently subject to their social and commercial influences.

Among the reasons assigned, in the resolutions adopted by the Council, for the opinion that the nation cannot be re-established in its present location, is stated, "the repeated refusal of the Presidents and Congress of the United States to interfere in their behalf." The Council declare, that though they love the land of their fathers, they regard the lot of exile immeasurably to be preferred to a submission to the laws of other States; and they are of opinion that a large majority of the Cherokee people would prefer a removal, if the true state of their condition was properly made known to them.

It appears that another Council, called the Red Clay Council, was held some time previous to this one, at which removal was not advocated.—The Running Waters Council express their disapproval of the course there recommended, and order that a delegation be sent to Washington to represent the views and wishes to those who prefer to remove to a country where the Cherokees can be preserved as a distinct community The Red Clay Council have also sent a delegation to Washington.

Elias Boudinot, in a letter, an extract from which is given in the Southern Recorder, writes: "The meeting will have a powerful effect. It seems already to have inspired a new energy in our people, who are determined to get out of the jurisdiction of the States.—[Baltimore American.]

WASHINGTON, JAN. 9.—A part of the delegation have arrived in this city, of the Cherokees, who were appointed by that portion of the nation who are favorable to the policy recommended by the President of the United States.

A committee of the House of Representatives of Massachusetts, have provided for the accommodation of the members six hundred and fifteen seats. It is ascertained that there are six hundred and three members elected.

The Regents of the University, at a meeting held on the 8th instant, appointed the Hon. STEPHEN VAN RENSSELAER, Chancellor of the University, in the place of Simeon De Witt, Esq deceased.

When Wm. Penn first landed in Pennsylvania, he walked with the Indians, sat down with them on the ground, and ate with them roasted acorns and hominy; then they began to *hop and jump*, whereupon Wm. Penn stepped up and *beat them all*. Such wise complaisance won and secured their friendship and affection for him during his life.

Ship Letters.—There were received at the Post Office in this city during the last year 420,359 ship letters; 183,855 were for the city delivery, and the remaining 236,504, were forwarwarded to other offices.—[Times.]

Mrs Bogue, of Amherst, on the 29 of Sept. last, the aniversary of her ninety-ninth year, spun sixty knots and thirty threads of handsome woolen yarn!

Spermaceti Whale Fishery.—The whole number of ships engaged in this valuable branch of the fisheries, is 273, of which 257 are now absent, viz;—From New Bedford 94, Nantucket 63, Fairhaven 14, Bristol 13, New London 10, Hudson 9, Warren 7, Edgartown 6, Falmouth 6, Newport 6, Sagharbor 5, Salem 3, Newburyport 3, Poughkeepsie 2, Portsmouth 2, Dartmouth 2, and 1 from each of the following ports, viz:—Boston, Plymouth, Wareham, Rochester, Portland, Wiscasset, Fall River, Providence, Stonington, Newburg, New York, and Wilmington, Del.; 16 ships only are in port. The aggregate tonnage of the 257 absent ships, is nearly 100,000 tons. The number of seamen and navigators employed on board these vessels, is not far from 9,000. The cost of the entire fleet, as fitted for these voyages of three years' duration, probably exceeds $6,000,000.

Among the ships now abroad, there are 31 which sailed in 1831, 73 in 1832, 88 in 1834, and 65 in 1834. Should no unforeseen calamity take place, whereby this important branch of national industry may be injured or interrupted, the number of spermaceti whale ships expected to arrive within the year 1835, may be set down at 70, and their cargoes at 135,000 barrels, valued at upwards of three millions of dollars.—[Nantucket Inquirer.]

The Loss by the fire in Chatham street yesterday, is estimated at $40,000, and the insurance at $27,000. There is no apology for not insuring against fire, when the premiums as compared with the risk are so moderate.

A Good Hit.—A Mr. Gray inquired of a negro servant what color he believed the devil was; "Why," replied the African, "the white men tell us he is black. We say he is white. But from his long age, I guess old Nick must be *gray*."

"*Chock home*" is what the sailors say when a thing can go no farther; and this might be said of the weather here for two days past. The thermometer (Farenheit) has been at 39 or 40 below 0, and consequently the mercury congealed!—[Bangor Whig.]

[FOR THE NEW YORK AMERICAN.]

American Anitquities.—An interesting communication was read at the last meeting of the Lyceum of Natural History, from General Swift, in which he makes known the existence, and details some particulars of, another of the ancient cities of this continent. This discovery was recently made by Capt. J. C. Cunningham of Mexico, an enterprising and intelligent gentlemen, while exploring "El Esteso de Topila," one of the tributaries of the river Panuco, that empties into the Gulf of Mexico at the city of Tampico. The ruins are situate at the base of a moutain, about 55 miles from Tampico, and disclose the vestiges of a regularly-planned city, the buildings of which were of hewn stone, on streets about 30 feet in width, runnning at right angles, with curb-stones and side-walks: where open, they were found to be covered with a smooth layer of small pebbles. The buildings had in every observed instance fallen inwards, and on the mounds so formed, are now growing large forest trees. Captain Cunningham noticed an inscription in characters resembling the Greek; and some remarkable structures, one of which he supposed to have been a tomb, and another a temple: from the latter he brought, from among many similar rude sculptures, a curiously distorted human face and figure, carved in stone, which he has presented to the Lyceum of Natural History, and it is now in their Museum. Capt. Cunningham is about to return to Tampico, and intends a more minute and careful examination of these interesting remains, whence it is probable he may be able to draw materials that will importantly assist archeologists in their endeavors to throw some light on the origin, habits and state of civilization of the early inhabitants of this continent. The proximity of this ancient town to the much-frequented city of Tampico, will, it is hoped, induce others of our countrymen to engage in the same work of research.

The annexed record of the temperature, from the 2 to 10 inst. including the cold Sunday the 4th, is from the table of an accurate observer and establishes the *maximum* of cold experienced here, as not exceeding 4 deg. under zero—almost moderate to the 30 and 40 degrees of Columbia county and Albany.

THERMOMETER.

	8 A. M.	12 M.	10 P. M.
January 2	29	36	27
3	9	11	2
4	0 4	7	4
5	3	17	14
6	15	9	1
7	0 1	5¼	1½
8	1	14	7
9	4	19	12
10	11	—	—

Steamboats were so much in demand yesterday for towing vessels, that as high as thirty dollars an hour was paid. The comaion price is ten dollars an hour,

MERCANTILE LIBRARY ASSOCIATION.—A most overflowing attendance of the members of this Association was induced last evening at the Clinton Hall, by the recurrence of the Annual Election for Officers.

At a general meeting previous to the election, at which Mr. *J. G. King* presided, the Annual Report was read, giving a very satisfactory account of the condition of the Institution, &c.—A short Address was made by the Chairman, and speeches by Messrs. Stebbins, Buckingham, and others, when the general meeting was dissolved and the election was proceeded with.—It was warmly contested—there being two rival tickets—and resulted *against* what was called the regular nomination. We subjoin a list of the successful candidates; and the election being over, take leave to express the hope that the excitement which attended it, may also cease.

R. R. BOYD, President.
ANDREW MOUNT, Vice President.
J. JAMES HORN, Secretary.
JAMES ROACH, Treasurer.

R. J. ANDREWS,	J. P. CRONKHITE,
CHARLES ROLFE,	S. T. NICOLL,
J. N. BRADLEY,	GEORGE PORTER,
C. B. SAMSON,	T. A. CUMMINS,
	Directors.

APPOINTMENTS BY THE PRESIDENT.

By and with the advice and consent of the Senate.

JAMES M. WAYNE, to be one of the Associate Justices of the Supreme Court of the United States, in the place of William Johnson, deceased.

BENJAMIN RENSHAW, to be Consul, for the port of Alicant, in Spain, in the place of George B. Adams.

JOHN STRYKER, to be Consul for the port of Galliod, (TEXAS,) in Mexico.

WILLIAM H. WICKES, Surveyor and Inspector of the Revenue for the port of Chester, in the State of Maryland, from the 5th inst., when his former commission expired.

EDWARD PESCUD, Surveyor and Inspector of the revenue for the port of Petersburg and City Point, in the State of Virginia, from the 12th inst. when his former commission expired.

SAMUEL ALEXANDER, Register of the Land Office for the district of land subject to sale at Quincy, in the State of Illinois, from the 2d of March next, when his present commission will expire.

FRANK J. ALLEN, Register of the Land Office for the district of lands subject to sale at Jackson, in the State of Missouri, from the 24th December, 1834, *vice* George Bullitt, Esq., deceased.

WILLIAM BLACKBURN, Receiver of Public monies for the district of lands subject to sale at Wapaukennets, in the State of Ohio, from the 21st Dec. ult., *vice* R. J. Skinner.

THOMAS J. CHARLETON, Collector of the Customs for the district and Inspector of the Revenue for the port of Hardwicke, in the State of Georgia, from the 30th ult., *vice* J. J. Maxwell.

TEMPERANCE MEETING OF MECHANICS.—We were led by the call of a public meeting, published in the papers, and numerously signed by some of our most respectable mechanics, to look in at Chatham-street Chapel last evening, and we know not when and where we have seen a more gratifying spectacle, than was afforded by the gathering there, in such a cause, of more than 2000 persons, most of whom were, we have little doubt, mechanics.

Gideon Lee opened the proceedings in an excellent address, was followed briefly by Mr. Mercein, and then by Mr. Hunt, of North Carolina, who, with an earnestness that denoted entire conviction, and with an archness and humor that enlivened, without rendering less impressive, the lesson he desired to inculcate, that intemperance is the bane of social and civil life—of industry, character and independence—kept alive the attention and interest of the audience for more than an hour. He concluded by reading the pledge to be signed by those who desired to join the Temperance Society, and then invited signatures.—Papers were immediately circulated throughout the Hall, and, as we heard, more than 500 signatures were obtained. We hope the ball will be kept in motion.

ANOTHER STEAMBOAT BURNT.—We are indebted to the editor of the Columbus Sentinel for the following disastrous information.—"Since our paper (of Jan. 3) went to press, we learn that the splendid new steamboat, Eloisa, (built at Pittsburg, under the superintendence of Col. D. J Britt, who was a part owner, and intended to ply between this and Apalachicola,) loaded with Cotton, was entirely consumed by fire on the night of the 31st ult. at Brown's Ferry, on the Chattahoochee. We understand that the disaster was the result of accident."

'Why did Adam bite the apple?' said a schoolmaster to a country boy. 'Because he had no knife to cut it,' said the boy.

It is to be regretted that the taste for music is not more prevalent in this country. It has a humanizing and gentle influence upon the character of a people, and affords a source of refined and innocent delight which nothing else can supply. A taste for music encourages all the social virtues; it furnishes an amusement which delights without danger, and affords instead of the dull and sating pleasures of dissipation, a source of delight as refined as it is endless. The ladies are particularly interested in this matter.—When a taste for music becomes more general in the other sex, they may depend not only on having more of their company, but having that company rendered more agreeable by the charms of gentleness, refinement and harmony.

There is a destiny hangs over us: we are not entirely our own masters, and cannot carve for ourselves. It is cruel to lay, in every case, a man's non-success at his door. There are often circumstances, not at his command to which almost any other would have been a victim. They who are at their ease, and have never been put into peril, may talk very calmly, and very sapiently; or may shake their heads with a hypocritical appearance of regret, when they are secretly exulting in their hard hearts.

BY THE WELLIAM GIBBONS, steamboat from Charleston, we have papers of Saturday evening last. The cold weather had continued there, with snow—and the thermometer at 18 deg.

For accounts of the Cotton market, we refer to the Commercial Record. There had been few arrivals at Charleston—there were on the 9th.—British brig *Burton* from Liverpool and the brig *Durant* from Boston—on the 10th there was no arrival—the packet ship *Anson* cleared for this port.

[*From the Courier & Enquirer.*]

TRIAL OF MATHIAS, THE PROPHET.

For the Murder of Mr. Elisha Pearson,

WHITE PLAINS, WESTCHESTER Co. }
Wednesday, Jan. 14, 1834. }

A Special Court of Oyer and Terminer for this county, assembled on Monday, and was thronged to a degree quite unexampled on any previous occasion. There were several important causes, both civil and criminal, to be brought before it, but the interest of these seemed wholly lost in the intense curiosity excited by the astonishing case of this man. During the first two days it seemed to be the prevalent opinion that the Grand Jury would not find the indictment against him, in consequence, it was said, of the absence of several important witnesses for the prosecution. Last night, however, it was generally rumored that the bill had been found; and at 10 o'clock this morning all doubts were removed by the entrance of the Jury with a bill of indictment against "Robert Matthews, otherwise called Mathias the Prophet," for the murder of Elisha Pearson, late of Mount Pleasant, in the county of Westchester. The Court immediately suspended the other business before them and ordered the prisoner to be brought up. He took his seat in the criminal box with a hurried, and, for him, unusually embarrassed air. He exhibited his favorite modicum of beard, and his hair, which appears somewhat more grey than when we last saw him, was also in much greater length and profusion. The expression of his countenance was careworn and anxious, and he seemed impressed with a reflection, that the present occasion was neither to be held in defiance nor treated with contempt. His dress was a green frock coat adorned with frog buttons, lined at the skirts with a pink and pea-green plaid silk; a green fancy silk vest, rather greasy, and stone-drab colored pantaloons.

Mr. Nelson, the District Attorney, then called upon him to hear the indictment, which set forth his alledged crime in five several counts—the first charging him with having caused the death of Mr. Pearson by mingling arsenic with his food between the 1st and the 6th of August, 1834; the second charging him with the murder by means of some metalic substance thus mingled which was unknown to the Jury; the third, with having thus poisoned him with the aid of an accessary unknown to the Jury; the fourth with having killed him by starvation whilst keeping him in durance and confinement in his own house; and the fifth with having caused his death by withholding from him whilst thus confined and suffering from a grievous illness such nursing and medical attention as were needful to his recovery. Whilst listening to the part of the first count which technically set forth that the poison had "entered the body" of the deceased, the prisoner's features acquired a slight expression of ridicule, but during the reading of the all the remaining counts, he preserved an unbroken gravity, slightly inclining his ear as if to hear every syllable distinctly, and erecting at regular intervals the tremendous beard on his upper lip in a manner which at a less solem juncture could not have been witnessed without laughter. Still neither in this nor in any other peculiarity of demeanour, could we perceive any of the usual *indicia* or concomitants of insanity. The moment the indictment was read, Mr. Western of New York, the prisoner's leading counsel, rose and said, "If the Court please, before we plead to this indictment, it will become my unpleasant duty to state some facts connected with the manner in which it has been found, that are, in my opinion, vitally important both to the forms of justice and to the interests of my client. I find that it has been framed under an undue influence, in consequence of the illegal access to the jury of an individual who was neither a witness, nor the District Attorney, who is alone authorized to hold intercourse with them during their solemn and responsible deliberations. In proof of this I beg to submit to the Court the following affidavit, and on which I shall move that the indictment be quashed.

"N. Nye Hall [who was the Associate Counsel of Mr. Western,] being duly sworn, saith, that he has been informed, and believes, that a person who is neither a witness, nor the District Attorney for the County of Westchester, has had access and communication with the Grand Jury, who found the bill of indictment against Robert Matthews, during the present term of the Court of Oyer and Terminer, for the aforesaid County, and that such communication was on the subject of said indistment. Deponent further saith, that the said person so having the said access is R. R. Voris, Esq. of Westchester, who in a conversation in deponent's presence, stated that the said Matthews was a great villain, or words to that effect, and that he deserved to be severely punished, or words to that import.—Sworn, &c."

This affidavit seemed to produce a great sensation in the Court, but Judge Ruggles after a short conference with his Associate Judges, refused the motion of counsel, which had been supported by an energetic address, and merely stated that "the Court do not see any sufficient reasons for quashing the indictment," and took the counsel's exception. Mr. Voris, who is a highly respectable counsellor of Sing-Sing and who seems had acted in the Grand Jury Room as an Assistant District Attorney during the necessary attendance of Mr. Nelson in Court, rose and said, "he trusted that whatever little character he may have acquired in the country would be deemed by the Court quite sufficient to repel the accusation of such an affidavit, from such a source." On which Mr. Hall rose and said, with great warmth of manner, "And I also trust that the opinion of the Court will not be affected by *such* a remark from *such* a source," or in words to that effect.

The District Attorney then states to the Court that for want of material witnesses to the prosecution of the cause, who were absent from illness, he wished it to be postponed to the next term of the Court. This was warmly opposed by Mr. Western, who required that the public prosecuter should make an affidavit of the fact embodying the name of the absent witnesses in order that he might put his finger upon them in case he should find it necessary to do so. Mr. Nelson replied he did not know upon what principle the gentleman could demand an affidavit from him, but he would follow the courtesy practised on such occasions, and state the names of the witnesses, which were Mrs. Folger, Dr. Condit, Jr., Dr. Jones, Dr. Canfield, and Catharine Gallaway.—And in addition to the reason for postponement arising from the absence of these witnesses, it had become necessary, in anticipation of the plea of insanity which he had learned was to be set up by the prisoner's counsel, to secure the attendance of persons who had known the accused for many years.

After some further discussion the Court decided to adjourn the cause to the next term, which will be April next, when, if we may judge from private information of high authority a developement of facts will be made more extraordinary than any yet recorded in the annals of imposition and delusion.

The London Courier, of the 11th of last month gives the following paragraph:

"There are in the United States, says a New York paper, 300,000 drunkards. Suppose they were all to die to day, and to be buried side by side in one continued line, allowing three feet for the width of each grave, and three feet between them—the line of graves would extent 3409 miles! Were they to be buried in one grave yard, they would cover an area of 680 acres, and a fence to enclose it would be more than four miles in circuit. War has its horrors—famine has its horrors—pestilence has its horrors—but the horrors of intemperance concentrate and exceed them all. In ten years' time the whole procession will have passed, and the grave yard will be filled. How long shall it be so? Will an end never come?"

Fire.—About half past two o'clock this morning, a fire broke out in a wooden building, in the rear of Amos street, the property of Mr Isaac Ammerman, and tenanted, and used as a dye house by Mr. James Mellville. It was considerably injured, and a quantity of yarn and dye stuffs destroyed; but the fire was extinguished before it reached any of the adjoining buildings.—[Jour. of Com.]

FOREIGN INTELLIGENCE.

LATER FROM EUROPE.—Another arrival—the South America from Liverpool, in a passage, for the season of the year, most unusual—brings London dates to the 16th ult.

The South America arrived off the Hook Saturday, and sailed on the 17th December, making the passage from port to port in 23 days.

The new English Administration is formed. Sir Robert Peel as Premier; and without any admixture, as will be seen, of Reformers.

Application was, it is said, made, but without success, both to *Lord Stanley* and *Sir James Graham*, to join the administration, whence the inference seems reasonable, that no such assurance was given of the future march of the Cabinet, even in the circumscribed path of reform, which those gentlemen have followed, as would justify their taking office.

The dates from Paris are of the 13th. The Chambers, as we stated in commenting on the news by the Sylvie de Grasse would be the case, did not meet between the 8th and 13th. On the 13th, Saturday, nothing special was done, and nothing at all on our subject; so that up to Monday, 15th Dec., no mention appears to have been made of the American treaty.

In Spain, *Mina*'s name and services do not appear to have produced as yet any confidence in, or good result to, the Queen's cause, nor to have in any manner dispirited the Carlists.

The packet ship *United States*, Holdridge master, in coming out of the dock, was run ashore by the pilot, and was obliged to be discharged, having, however, only slightly damaged her cargo. She would soon be ready again for sea.

ENGLAND.

LONDON, Dec. 11.—The King held a Privy Council yesterday, which was attended by the Lord Chancellor, (Lyndhurst) the Duke of Wellington, Marquess of Camden, Earls of Roslyn, Amhurst, and Jersey, Lords Ellenborough, Cowley, and Maryborough, Sir R. Peel, Sir C. M. Sutton, Sir John Becket, Sir H. Hardinge, Messrs. Goulburn and Herries—our future Reformers.

Sir. R. Peel was sworn into office as Chancellor of the Exchequer, and received the seals of office from the King. He will also be first Lord of the Treasury; but with respect to the latter some delay must take place.

Parliament was ordered to be further prorogued from the 18th of the present month to Thursday, the 15th of January. But this is a mere matter of ferm, as Parliament can be dissolved at any time. Nothing, however, is yet known of the dissolution, though it is probable that the moment the ministerial arrangements are completed it will take place.

[*From the London Globe, Dec. 15—evening.*]

The New British Ministry.—The following is a correct list of the new Cabinet Ministers appointed at the Council held this afternoon at St. James's Palace:

Sir R. Peel, First Lord of the Treasury and Chancellor of the Exchequer.
Lord Lyndhurst, Lord Chancellor
Duke of Wellington, Foreign Secretary.
Lord Wharncliffe, Privy Seal.
Earl of Aberdeen, First Lord of the Admiralty.
Lord Rosslyn, President of the Council.
Mr. Goulburn, Secretary for the Home Department.
Mr. Herries, Secretary of War.
Sir Henry Hardinge, Secretary of Ireland.
Sir G. Murray, Master-General of the Ordnance.
Mr. A. Baring, President of the Board of Trade.
Sir L. Knatchbull, Paymaster of the Forces.
Lord Ellenborough, President of the Board of Control.

The above form the Cabinet.

The Secretaryship for the Colonies, and the Chancellorship for the Duchy of Lancaster, are not yet filled up.

The following appointments have been made:
Sir J. Scarlett, Chief Baron of the Exchequer.
Sir E. Sugden, Chancellor of Ireland.
Lord Jersey, Lord Chamberlain.

Lord Stanley.—No doubt the refusal of Lord Stanley to take office will be fastened on by the men of the crisis as a proof that the country is on the eve of great disasters. We have the satisfaction of being enabled to calm their raptures, by an assurance that Lord Stanley, though declining to take office for the present, has unequivocally asserted that he will support the King and the Ministers of his choice.—[West Kent Guardian.

GHENT, DEC. 13.—Our arrivals from Germany mention that a marriage had been determined on between her Royal Highness the Princess Victoria, presumptive heiress of the throne of Great Britain, and his Royal Highness Prince William Alexander Constantine, the second son of his Royal Highness the Prince of Orange. This alliance would be the presage of the most intimate and friendly relations between the Netherlands and England. It would enhance, if possible, the splendor of the House of Brandenburg and the imperial family of Russia.—[Messager de Gand.]

FRANCE.

PARIS, DEC. 12.—M. de Broglie is definitely appointed Ambassador to London. Nothing is waiting for to make this nomination official, but to know the ministerial arrangements of the English Cabinet.

It was said on 'Change, that the Chamber intended to apply to the National the maximum of the penalty, viz: five years imprisonment and a fine of 20,000 francs. This may be the wish of some fanatic, such as we sometimes meet with, but we find it difficult to believe that the Chamber of Peers can have so far engaged itself that it can be announced beforehand that it will condemn, and to what penalty it will condemn.

The Paris paper (the Constitutionel) states that "Prince Talleyrand speaks of a letter which he has received from the Duke of Wellington, inviting him to return to London, and assuring him that no alteration would be made in the foreign relations of the country."

The principle topic of reflection at present in the Paris papers is the citation of the editor of the National before the Chamber of Peers, for publishing in his journal an article derogatory to the dignity of that body. In pursuance of this summons M. Rouen, the respectable editor of the National, presented himself at the bar of the Chamber of Peers on Friday last, and on his application a delay of four days was allowed him for the purpose of preparing his defence.

At the sitting of the Court of Assizes yesterday M. Bichot, editor of the Tribune, was arraigned for a libel against the King, contained in an article published in that journal, entitled "*Du Voyage du Roi a Compeigne*," in which allusions were made to the events at Lyons, and to the unfortunate duel in which M. Dulong was killed.—M. Bichot was found guilty, and sentenced to 12 months imprisonment and a fine of 6,000 francs.

SPAIN.

Postscript of the Journal de Paris, of Dec. 13:

General Mina, on the 7th instant, proceeded to Lenz in order to protect a convoy of money expected there.

No new engagement has taken place. On the following day he returned to Pampeluna. Don Carlos was at Escura on the 7th, when Zumalacarreguy was directing his steps towards the Borunda.

PARIS, DEC. 12.—A courier from Cadiz brings us the intelligence that on the 19th, the anniversary of the Queen's birthday, the civil governor having objected to the singing of the patriotic songs by the actors, the spectators threw stones into his box, and they went to his palace, which they attacked; one of the domestics was wounded. At the departure of the courier the agitation had not ceased, and had spread to Xerxes de la Frontera.

Compromise in Spain.—The Memorial des Pyrenees of Pau says—"It is affirmed that Zumalacarreguy has written to General Mina, proposing, as a means of putting an end to the effusion of blood in the Peninsula, that a marriage should be contracted between the young Queen and the son of Don Carlos; but Mina replied, that rebels must first lay down their arms. The war, therefore, is about to recommence with increased fury, and will become a war of extermination."

It is conjectured by the Times of the 16th ult. and by the Standard (which as a Tory paper may be supposed the more accurate now in such matters,) that *Lord de Grey*, better known as Lord Grantham, is to be the Vice Regent of Ireland, in the place of the Marquis Wellesly, who had quitted his government, as will be seen by the annexed:

ARRIVAL OF THE LORD LIEUTENANT OF IRELAND.—The Marquis and Marchioness Wellesley and suite arrived at the Clarendon-hotel, New Bond street, on Friday evening, from the Vice-regal-lodge, at Dublin Castle. The Firebrand Government steamer conveyed the Marquis and Marchioness, with their carriages and luggage, from Howth to Holyhead. Mr. and Mrs. Caton arrived at the Clarendon on the preceding evening, from Ireland.

The Rt. Hon. *G. R. Dawson*, brother-in-law of Mr. *Peel*, is to be the new Secretary for Ireland.

The Examiner thus speaks of Sir R. Peel.

Sir Robert Peel has answered to the Duke's whistle. He has hurried home and sprung into office with the speed of mischief. His politics turned with his coach wheels. Perish principles—welcome place! What are now his opinions? The opinions which he finds in the coat pocket of his official uniform.

Miraculous as was the Duke's conversion to Reform, that of Sir Robert must have been more sudden. He receives a note of invitation—it was but to ask and have—to govern or not to govern was then the short question—was he to stay at Rome with his principles, or to order post horses and dash home through thick and thin for the prize?—he was a Reformer in the crack of a whip. His professions were of no more concern to him than the cattle which speeded him on his journey—what mattered it whether he was drawn by a black, a white, or a piebald, so that he advanced to his goal? What cares he for the color of his opinions, so that they forward his fortunes? The journey to government was no more to be accomplished with his own principles than with his own horses, so he took hack-posters. And now here he is seated in the Treasury, First Lord and Chancellor of the Exchequer; what else he is to be, whether anti-reformer or sham-reformer, is doubtless to him immaterial—he will take the part which place makes convenient.

Madame Recamier has left the interest of 20,000f. as an annual prize for the best treatise on the influence of grief as a cause of sickness and death. The prize is to be awarded by the Académie de Médecine. The unfortunate lady was herself for a long time a prey to wasting sorrows, under which she at length sunk. The consciousness of her approaching end, and of its cause, no doubt originated the idea of this singular bequest. *Journal Hebdomadaire, Oct. 25.* [The principal cause of the grief of this once beautiful and always amiable lady was the loss of her personal charms. She did not feel what everybody who knew her did—that age had not impaired her power of pleasing and interesting all who saw her.]

The Liverpool papers of 17th December, announce the arrival by the "England, from this port, of *nine hundred and fifty* chests tea." This is one of the fruits of abolishing the monopoly of the East India Company.

Death of the Rev. Edward Irving.—On the 6th instant, at Glasgow, between the hours of 11 and 12 o'clock at night, died in the 43d year of his age, the Rev. Edward Irving. He was sensible to the last, and his departing words were "In life or in death I am the Lord's;" previous to which, he sung the 23d psalm in Hebrew, accompanied by his wife's father, the Rev. John Martin.

[From Tait's Edinburgh Magazine.]

THE PAST,—THE PRESENT,—THE FUTURE.

Rhetick! Astick! Prostick!

The *Past*,—the *Present*,—and the *Future*:—these
Are Time's three portions: and Eternity's
Can be no greater. Strange is their division:
Each with each making union and collision.
They were, or are, or will be, each the same;
And each the other, in their order, name
And being. Yet two of these are infinite:—
The Past, still reflueat on the deepening night
Of pre-eternity, whose unborn source
Receives, absorbs, accelerates, its course;
The Future from its post-eternal store
Forth issuing, and extending more and more;
The Present,—how shall we its state define?
What hand shall mete its nice and narrow line?
Gone, even in its coming,—subtle shade,
Whose advent by no art of man is stayed,
Nor its departure speeded; that small space,
Whose point the Future and the Past efface
In the same instant. It will be the Past,
And it hath been the Future: yet doth last,
The unchanged, always changing, Present; still
Blending the boundaries of warp and will.
The Isthmian* now of each Eternity,
Twining the has been, being, and to be;
The bridge of either KYRE, single-arched,
O'er whose short span the ceaseless Past hath marched
From the quick Future, which its track pursues,
O'ertakes, impels, effaces, and renews.
The far Past, fades behind Oblivion's veil;
The nearer gleams through Memory's reflex pale;—
Dark as the distant Future; while the near
Takes the prismatic tints of hope and fear.
Our sires possessed the Past—its state was theirs,
Our children are the future's destined heirs:
While between either range ourselves are thrown,
The waste forgotten, and the waste unknown:—
So are the twain of lifeless void to us—
The anti-natal, and the pothumous;
Shedding alike their deep, impervious gloom,
Before the cradle and behind the tomb.
But the immediate Present—which doth ewell
On its own instant indivisible—
The speck of time, incapable of pause—
It was what will be, and will be what was,
Yet ever is, a filling, emptying sea;
Through which the river of Futurity
Exhaustless rolls into the broad and deep
Gulf of the Past, with never tiring sweep.
How strange, that what is nothing should be all—
Continual time, a timeless interval—
A viewless atom, slipping from the sense,
An orb of undescribed circumference,
Forbear the enlarging thought—nor urge a theme
Which He alone can reach—the Power Supreme,—
Within the glance of whose all seeing eye,
The Past, the Present, and the Future lie,—
A triune point in one eternity.
Yet hence a seasonable lesson may
Well be extended——————
Be then our net with present wisdom cast,
To catch the Future, ere it be the Past! E. L. L. S.

* O. Life!
Thou weak built Isthmus, thou dost proudly rise,
Up between two eternities! COWLEY.

MECHANICS' MAGAZINE.

THE NUMBER FOR DECEMBER, which completes the fourth volume of this popular work, is published. It contains a portrait, engraved on copper, of ROBERT FULTON, with a Memoir, and some documents respecting his claim to the honor of first originating steam navigation. Also, upwards of 50 articles of interest and utility, connected with the arts and sciences.

☞ The first number for 1835 will be ready very shortly. Subscribers who are deficient of numbers can be supplied, as the work is stereotyped.

The Mechanics' Magazine and Register of Inventions and Improvements is published by the Proprietors, D. K. MINOR & J. E. CHALLIS, at No. 35 Wall-street, New York: in *weekly* sheets of 16 pages, at 6¼ cents—in monthly parts of 64 pages, at 31¼ cents—in volumes of 384 pages, in cloth boards, at $1.75—or at $3 per annum, *in advance*.
JOHN KNIGHT, (formerly proprietor of the London Mechanics' Magazine,) Editor.

AGENTS FOR NEW PUBLICATIONS.

HENRY G. WOODHULL, of Wheatland, Monroe county, New York, is agent for the following Publications:

The New York American Daily, at $10.00—Tri-Weekly, at $5.00—Semi-Weekly, at $4.00 in advance.

The American Railroad Journal, Weekly, at $3.00 per annum.

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The Quarterly Journal of Agriculture and Mechanics, at $5.00 per annum, or $1.25 per number.

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The Ladies' Companion, of 54 pages a month, at $3.00 per annum, in advance.

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All Communications addressed to me, at Wheatland, Monroe county, will be promptly attended to. September 19, 1834. n6v6 Ctf.

RAILROAD CARS,

Messrs. D. & J. MITCHELL, Eclipse Foundry, Hollidaysburgh, Huntington county, Pennsylvania, are now prepared to manufacture, at short notice, any number of Railroad Cars—in the most approved and substantial manner. jan. 24 1

STEPHENSON,

Builder of a superior style of Passenger Cars for Railroad,

No. 264 Elizabeth street, near Bleecker street, New-York.

☞ RAILROAD COMPANIES would do well to examin these Cars; a specimen of which may be seen on that part of the New-York and Harlaem Railroad, now in operation. J25 tf

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RAILROAD CAR WHEELS AND BOXES, AND OTHER RAILROAD CASTINGS.

☞ Also, AXLES furnished and fitted to wheels complete at the Jefferson Cotton and Wool Machine Factory and Foundry, Paterson, N. J. All orders addressed to the subscribers at Paterson, or 60 Wall street, New-York, will be promptly attended to.

Also, CAR SPRINGS.

Also, Flange Tires turned complete.

J8 ROGERS, KETCHUM & GROSVENOR.

PATENT HAMMERED SHIP, BOAT, AND RAILROAD SPIKES.

☞ Railroad Spikes of every description required, made at the Albany Spike Factory.

Spikes made at the above Factory are recommended to the public as superior to any thing of the kind now in use.

Ship and Boat Spikes made full size under the head, so as not to admit water.

Orders may be addressed to Messrs. EBASTUS CORNING & CO., Albany, or to THOMAS TURNER, at the Factory, Troy, N. Y. sept.12-1 y

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RAILWAY IRON.

☞ Ninety-five tons of	1 inch by	¾ inch,	*Flat Bars* in
200 do.	1¼ do.	¾ do.	lengths of 14 to 16
40 do.	1½ do.	¾ do.	ft count'r sunk
800 do.	2 do.	¾ do.	holes ends cut
800 do.	2½ do.	¾ do.	at an angle of
soon expected.			45 degr's with
			splicing plates,
			nails to suit.

250 do. of Edge Rails of 36 lbs. per yard, with the requisite chairs, keys and pins.

Wrought Iron Rims of 30, 33, and 36 inches diameter for Wheels of Railway Cars, and of 60 inches diameter for Locomotive wheels.

Axles of 2½, 2¾, 2¾, 3, 3½, 3¼, and 3½ inches diameter for Railway Cars and Locomotives of patent iron.

The above will be sold free of duty, to State Governments and Incorporated Governments, and the Drawback taken in part payment. A. & G. RALSTON.

9 South Front street, Philadelphia.

Models and samples of all the different kinds of Rail, Chairs, Pins, Wedges, Spikes, and Splicing Plates, in both in this country and Great Britain, will be exhibited to those disposed to examine them. d71meowr

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MILL DAM FOUNDRY FOR SALE,

☞ The Proprietors of the Mill Dam Foundry offer for sale or lease, their well known establishment, situated one mile from Boston. The improvements consist of

No. 1. *Boiler House*, 50 feet by 30 feet, containing all the necessary machinery for making boilers for *Locomotive* and other steam Engines.

No. 2. *Blacksmith's Shop*, 50 feet by 20, fitted with cranes for heavy work.

No. 3. *Locomotive House*, 54 feet by 25, used for putting together Locomotive Engines. Several of the best Engines in use in the United States have been put in this establishment.

No. 4. A three story brick building, covered with slate, 100 feet by 46, containing two water-wheels, equal to 40 horse power; Machine Shop, filled with lathes, &c.; Pattern Shop; Rolling Mill and Furnaces, capable of rolling 4 tons of iron per diem, exclusive of other work; three Trip Hammers, one of which is very large; Engine for blowing Cupola Furnaces, moved by water-wheel; one very superior 12 horse Steam Engine, which could be dispensed with; and a variety of other machinery.

No. 5. An Iron Foundry, 80 feet by 45, with a superior air Furnace and two Cupolas, Core oven, Cranes, &c. fitted for the largest work. Attached to the Foundry is a large ware-house, containing Patterns for the Castings of Hydraulic Presses, Locomotive and other Steam Engines, Lead Mill Rolls, Gearing, Shafts, Stoves, Grates, &c. &c. These were made of the most durable materials, under the direction of a very scientific and practical Engineer, and are supposed to be of great value.

No. 6. A building, 65 feet by 36, containing a large stack of chimneys, and furnaces, for making Cast Steel. This building is at present used as a boarding-house, and can accommodate a large number of men.

No. 7. A range of buildings, 200 feet long by 36, containing counting room, several store rooms, a Brass Foundry, room for cleaning castings, a large loft for storing patterns, stable for two horses, &c. &c.

The above establishment being on tide water, presents greater advantages for some kinds of business than any other in the United States. Coal and Iron can be carried from vessels in the harbors of Boston, to the wharf in front of the Factory, at 25 to 30 cents per ton. Some of the largest jobs of Iron work have been completed at this establishment; among others, the great chain and lift pumps for freeing the Dry Dock at the Navy Yard Charleston.

The situation for Railroad work is excellent, being in the angle formed by the crossing of the Providence and Worcester Railroads. The Locomotive "Yankee," now running on the latter road, and the "Jonathan," purchased by the State of Pennsylvania, were built at these works. With the Patterns and Machinery now in the premises, 12 Locomotives and as many tenders, besides a great quantity of cars and waggons, could be made per annum.

For terms, apply to

THOS. J. ECKLEY, Treas', &c., Boston, or to
ROBERT RALSTON, Jr., Philadelphia.

Boston, Dec. 30, 1834.

☞ TOWNSEND & DURFEE, of Palmyra, *Manufacturers of Railroad Rope*, having removed their establishment to Hudson, under the name of *Durfee, May & Co.* offer to supply Rope of any required length (without splice) for inclined planes of Railroads at the shortest notice, and deliver them in any of the principal cities in the United States. As to the quality of Rope, the public are referred to J. B. Jervis, Eng. M. & H. R. R. Co. Albany; or James Archibald, Engineer Hudson and Delaware Canal and Railroad Company, Carbondale, Luzerne county, Pennsylvania.

Hudson, Columbia county, New-York, }
January 29, 1833. }

PATENT RAILROAD, SHIP AND BOAT SPIKES.

☞ The Troy Iron and Nail Factory keep constantly for sale a very extensive assortment of Wrought Spikes and Nails, from 3 to 10 inches, manufactured by the subscriber's Patent Machinery, which after five years successful operation and now almost universal use in the United States (as well as England, where the subscriber obtained a Patent,) are found superior to any ever offered in market.

Railroad Companies may be supplied with Spikes having countersink heads suitable to the holes in iron rails, to any amount and on short notice. Almost all the Railroads now in progress in the United States are fastened with Spikes made at the above named factory—for which purpose they are found invaluable, as their adhesion is more than double any common spikes made by the hammer.

☞ All orders directed to the Agent, Troy, N. Y., will be punctually attended to.

HENRY BURDEN, Agent.

Troy, N. Y. July, 1831.

☞ Spikes are kept for sale, at factory prices, by I. & J. Townsend, Albany, and the principal Iron Merchants in Albany and Troy; J. I. Brower, 232 Water street, New-York; A. M. Jones, Philadelphia; T. Janvier, Baltimore; Degrand & Smith, Boston.

P. S.—Railroad Companies would do well to forward their orders as early as practical, as the subscriber is desirous of extending the manufacturing so as to keep pace with the daily increasing demand for his Spikes.

J23 1am H. BURDEN.

SURVEYORS' INSTRUMENTS.

☞ Compasses of various sizes and of superior quality warranted.

Leveling Instruments, large and small sizes, with high magnifying powers with glasses made by Troughton, together with a large assortment of Engineering Instruments, manufactured and sold by

E. & G. W. BLUNT, 154 Water street,
J31 6t corner of Maidenlane.

SURVEYING AND ENGINEERING INSTRUMENTS.

☞ The subscriber manufactures all kinds of Instruments in his profession, warranted equal, if not superior, in principles of construction and workmanship to any imported or manufactured in the United States; several of which are entirely *new*: among which are an Improved Compass, with a Telescope attached, by which angles can be taken with or without the use of the needle, with perfect accuracy—also, a Railroad Goniometer, with two Telescopes—and a Levelling Instrument, with a Goniometer attached, particularly adapted to Railroad purposes.

WM. J. YOUNG,
Mathematical Instrument Maker, No. 9 Dock street, Philadelphia.

The following recommendations are respectfully submitted to Engineers, Surveyors, and others interested.

Baltimore, 1832.

In reply to thy inquiries respecting the instruments manufactured by thee, now in use on the Baltimore and Ohio Railroad. I cheerfully furnish thee with the following information. The whole number of Levels now in possession of the department of construction of thy make is seven. The whole number of the "Improved Compass" is eight. These are all exclusive of the number in the service of the Engineer and Graduation Department.

Both Levels and Compasses are in good repair. They have in fact needed but little repairs, except from accidents to which all instruments of the kind are liable.

I have found that thy patterns for the levels and compasses have been preferred by my assistants generally, to any others in use, and the Improved Compass is superior to any other description of Goniometer that we have yet tried in laying the rails on this Road.

This instrument, more recently improved with a reversing telescope, in place of the vane sights, leaves the engineer scarcely any thing to desire in the formation or convenience of the Compass. It is indeed the most completely adapted to lateral angles of any simple and chean instrument that I have yet seen, and I cannot but believe it will be preferred to all others now in use for laying of rails—and in fact, when known, I think it will be as highly appreciated for common surveying.

Respectfully thy friend,
JAMES P. STABLER, Supt of Construction of Baltimore and Ohio Railroad.

Philadelphia, February, 1833.

Having for the last two years made constant use of Mr. Young's "Patent Improved Compass," I can safely say I believe it to be much superior to any other instrument of the kind, now in use, and as such most cheerfully recommend it to Engineers and Surveyors.

E. H. GILL, Civil Engineer.

Germantown, February, 1833.

For a year past I have used instruments made by Mr. W. J. Young, of Philadelphia, in which he has combined the properties of a Theodolite with the common Level.

I consider these Instruments admirably calculated for laying out Railroads, and can recommend them to the notice of Engineers as preferable to any others for that purpose.

HENRY R. CAMPBELL, Eng. Philad.
m1 1y Germant. and Norris. Railroad

LEGISLATURE OF NEW YORK.

IN SENATE—*Saturday.*

The President announced the following.

STANDING COMMITTEES.

On Claims—Messrs. Sudam, Tracy, Fisk.

On Finance—Messrs. Van Schaick, Halsey, Beardsley.

On Judiciary—Messrs. Lansing, Edmonds, Edwards.

On Militia.—Messrs. Maison, Kemble, Gansevoort.

On Canals—Messrs. Hubbard Armstrong Livingston.

On Railroads—Messrs. Edwards, Mack Maison.

On roads and Bridges—Messrs. Seger, Willes, Jones.

On Literature—Messrs. Gansevoort, Bishop, Young.

On State Prison—Messrs. Macdonald, Beardsley, Lansing.

On Banks and Insurance Companies—Messrs. Edmonds, Armstrong, Stower.

On Divison of Towns and Counties—Messrs. Fisk, Mack, Beckwith.

On Agriculture—Messrs. Halsey, Cropsey, Griffin.

On Manufactures—Messrs. Bishop, Loomis, Downing.

On Privileges and Elections—Messrs. McDowell, Wills, Beckwith.

On Enrolled Bills—Messrs, Mack, Lawyer, Lacey.

On Indian Affairs—Messrs. Kemble, Loomis, Fox.

On Expiring Laws—Messrs. Tracy, Macdonald, Cropsey.

On Expenditures—Messrs. Stower, Griffin, Loomis.

On Incorporation of Cities and Village—Messrs. Livingston, Seger, Beckwith.

Select Committees on Governor's Message.

On so much as relates to County Prisons—Messrs Armstrong, Lacy, Edmonds.

"To Police of County Poor Houses—Messrs. Kemble, Downing, McDowell.

"To Instruction of the Blind—Messrs. Young, Livingston, Sudam.

"To Asylum of the Insane Poor—Messrs. Beardsley, Gansevoort, Lansing.

"Lotteries and the sale of Lottery Tickets—Messrs. Stower, Tracy, Van Schaick.

"To an enumeration of the inhabitants—Messrs Cropsey, Jones, Lawyer, Bishop, Seger, Hubbard, Halsey, Fox.

IN ASSEMBLY.

The SPEAKER announced the following

STANDING COMMITTEES.

Ways and Means—Messrs. Dayan, Cash, Pettit, Shafer, King.

On Grievances—Messrs. Adams, Hough, Brooks, Mallery, Moore.

On the Judiciary—Livingston, Roosevelt, M. H. Sibley, Krum, Dayan.

On expiring laws—Messrs. Stetson, Moseley, Warren, A. Hascall Kent.

On Claims—Messrs. M. H. Sibley, Burhans, Cuykendall, A. Woodworth, Benjamin.

On Colleges, Academies and Common Schools—Messrs. Wetmore, Burke, Clinch, Van Bergen. P. W. Paddock.

On Engrossed Bills—Messrs. Suffern, Peck, Plumb, Crowel, Niles.

On the Erection and Division of Towns and Counties—Messrs. Palmer, Griswold, Harvey, Ingersoll, W. Woodworth.

On the Incorporation of Cities and Villages—Messrs. Jackson, Ringgold, Tillinghurst, Tomlinson Wylie.

On Agriculture—Messes. Healey, Becher, Conklin, Crary, Horton.

On the Incorporation of Charitable and Religeous Societies—Messrs. Thorn, Coe, Wheeler, T. Lewis, Bennet.

On the Incorporation and alteration of the Charters of Banking and Insurance Companies—Messrs. Wilkinson, Adams, Davis, Van Benthuysen, Denniston.

On the Petitions of Aliens—Messrs. Patterson, J. Clark, Philo, Tyrrell, E. Strong.

On the establishment of Roads, Bridges, &c.—Messrs. Anthony, Phillips, G. Strong, Hicks, Blatchly.

On Canals—Messrs. Wager, Baker, A. Clark, Crain, W. S. Paddock.

On Railroads—Messrs. Roosevelt, Ogden, Preston, Eldred, Hutchingson.

On States Prisons and the Penitentiary system—Messrs. Stevens, Crosby, Groom, Cadwell, J. W. Lewis.

On the Militia and the Public Defence—Messrs. Lockwood, Fisher, Craim, Stetson, Wetmore.

On Indian Affairs—Messrs. Moseley, Lytle, Jones, Barnum, McKie.

On the manufacture of Salt—Messrs. Parker, Seger, Barnes, A. Brown, Hillyer.

On Medical Societies—Messrs. Judd. Rice, Williams, Murphy, Waldron.

On two thirds bills—Messrs. Gray, Herttell, Burr, Suffern, Wager.

On Public Lands—Messrs. King, Woodbury, Odell, Powers, Hildreth.

On Trade and Manufactures—Messrs. Quackenboss, Springer, Hillet, Woodward, M'Clure.

Select Committee on the Governor's Message.

On so much as relates to State Prisons—Messrs. Carr, Burhans, Griswold, Loomis, C. Clark, Williams, Wilkinson, D. Sibley.

On so much as relates to Poor Houses—Messrs. Ostrom, Simmons, Farwell, Richmond, Hendee.

On so much as relates to Insane Poor—Messrs. Hertell, Ogden, Van Bergen, Beecher, Tillinghast, Woodbury, Coe, Plumb.

On so much as relates to the Blind—Messrs. Cash, J. Haskell, Livingston, Moore, Gray, Carpenter, Cuykendall. G. Brown.

WEEKLY RERORT OF DEATHS.

The City Inspector reports the death of 175 persons for he week ending on Saturday last, of whom 40 were men, 33 women, 50 boys, 43 girls—of the following

DISEASES.—Asphyxia 1, burned or scalded 6; casualty 2; convulsions 14; consumption 34; contusion 1; cramp in the stomach 1; dropsy 2; dropsy in the head 5; fever, 1; fever, bilious 1; fever, remittent 1; fever, scarlet 5; fever, typhus 3; flux infantile 1; gravel 1; hives or croup 9; inflammation of the bowels 3; of the brain 4; of the chest 4; of the liver 1; intemperance 7; marasmus 4; old age 6; palsy 2; peripneumony 18; rheumatism 2; small-pox 14; sprue 1; stillborn 12; suicide 2; tabes mesenterica 1; teething 3; whooping-cough 2; worms 2.

Of whom 64 were of the age of one year and under; 11 between 1 and 2; 18 between 2 and 5; 6 between 5 and 10; 5 between 10 and 20; 20 between 20 and 30; 18 between 30 and 40; 10 between 40 and 50; 12 between 50 and 60; 5 between 60 and 70; 4 between 70 and 80; 2 between 80 and 90.

GERRET FORBES, City Inspector.

☞ Of the above, 19 were colored persons.

SALES OF REAL ESTATE AT AUCTION,

By James Bleecker & Sons—*January* 10.

The vacant lot on the corner of Bleecker and Charles streets, 25 by 75 feet	$3400
The three lots adjoining with same building, being 70 feet on Bleecker and 75 on Charles st.	8300
The house and lot No. 118 Franklin street, between Chapel and Church sts. lot 20 by 50 feet	355
The lot on East Broadway, next the corner of Montgomery street, running to Division street, with a two story house, being 275 Division street, lot 23 by 165	6650
The lot on the corner of Liberty and Greenwich streets, being about 45 feet on Liberty, and about 64 feet on Greenwich street	13,000
The lot No. 30 Gold street. about 27 feet front, 29 in the rear, and 83 deep	10,000
One lot on the corner of State and Nevins street, Brooklyn, 25 by 100	825
Four lots adjoining the above at 675	2,000
One lot on the opposite corner	900
Eight lots adjoining the above at 700	5600
One lot on the corner of Avenue C and 4th st., 24 by about 100	1500
Three lots adjoining the same at 1200	3600
Six lots on 39th sts., near 3d Avenue, each 800	4800
Seven lots adjoining the above, each 650	4550
The three story brick house No. 91 Beekman, between Nassau and William sts, 23 1-2 by 100 ft	13,500
The two story brick house and lot No. 11 Hague street, lot about 16 by 38	3500
The 2 story brick front house, adjoining the above 'No. 9,' about the same dimensions	3100
The lot adjoining the last, partly in the rear, with a two story front house	3700
The three story brick house and lot 546 Broadway, lot 20 by 100 feet	7250
The 3 story brick house and lot No. 54 Broadway, lot 20 by 100 feet	9400
The three story house and lot adjoining the same	9500
The three houses and lots on S. corner of the Bowery and Grand street, 50 feet front on Bowery and 75 on Grand	26,000
The lot No. 4 Front street, running to Water st. being No. 2 Water street, being 31 1-2 ft. on Front 25 on Water, and 137 feet in depth	14,500

THE EXILE.

Amidst Siberia's mountains,
Dark glens and ice plains dreary,
Dull mists and frozen fountains,
An Exile worn and weary
Pined 'neath the galling chain
Of Muscovy's creation;
Then wildly asked if hope were vain
From ev'ry Christian nation.

"I sought not battle, loved not strife,
"But bless'd my homely board.
"Till forced to save, or lose my life,
"I snatch'd the desperate sword.
"The horde of Russian spoilers swept,
"Whilst Rapine led their van;
"My infants shriek'd their mother wept—
"Must I not feel as man!

"Wife, babes, home, shelter, all destroy'd—
"Ah! what remained to me!
"Revenge,—revenge my arm employ'd,
"Till crush'd by tyranny.
"What cared I for the sanguine wave,
"Whilst Russian was the flood?
"But when I saw the Polish brave
"Immersed in Poland's blood.

"My head, my heart, my hand alike
"Grew savage in the field;
"Despair's dark dictates bade me strike,
"Grim horror held my shield.
"Oh, Poland! had thy martial train
"Been powerful as brave,
"Ne'er had the tyrant Russian chain
"Fetter'd a Polish slave!

"No fond one left to sigh farewell,
"Nor kind hand mine to clasp,
"Oh, I was like the wild gazelle
"Within a tiger's grasp!
"Home, hope, and freedom lost to me,
"What charm could life contain?
"The darkest page of history
"Will show our conflict vain.

"Yes, Despotism has subdued
"All that he can subdue;
"But 'midst the wildest solitude
"The soul of freedom grew:
"Chains cannot gall the master mind,
"Though round the captive thrown,
"This, to the glory of mankind,
"Was shown at Marathon.

"More modern story bids us bless
"The Grison's happy hand,
"When valour's daring met success,
"And freed his native land.
"Oh might the shade of gallant Tell
"Sarmatia's heart relume,
"And to some ruin'd Polish cell
"Call Glory from her tomb!

"Although my sun may now be set,
"And broke for aye my sword,
"If in the lapse of ages yet
"My country be restored—
"If on her hills the free-born boy,
"If in her vales the song,
"If round her hearth the hallow'd joy,
"If to her altars throng,

"A graceful race to praise their God,
"In peace and freedom blest—
"I'd stretch me on Siberia's sod,
"And sink in dreamless rest.
"But if the fetters and the fate
"That Moscow's hand impose,
"Be destin'd long as Poland's date,
"And deep as Poland's woes,

"My soul had best no prescience keep,
"My sense pierce not the gloom;
"Despair might groan, but would not weep,
"O'er Poland's nameless tomb.
"Sunless and starless in her woes,
"Unseen, unsought, unwept,
"Leave her where cypress only grows,
"Where omens dark are kept!

"No, no! the Cadmus-harvest yet
"Will ripen on thy plains;
"And though proud Moscow may forget
"The captive and his chains,
"Time shall rekindle Poland's fame,
"My country yet shall be
"A nation bearing honour'd name—
"Brave, independent, free!"

Thus warm the hapless Exile's pray'r,
Thus deep his patriot sigh,
Whilst hope illumed his famish'd cheek,
And lit his tear-dimm'd eye.
But now the chains are broken,
The spirit free to roam—
His sorrows all are spoken,
Kind death conducts him home!

RAILROAD AND CANAL MAP.

THIS long promised Map is now ready for those who wish it. Its size is 24 by 40 inches. It is put up in a convenient pocket form, in morocco covers, and accompanied by over 70 pages of letter press, giving a concise description of, or reference to, each Road and Canal delineated on the Map. It will also be put up in *Marble Paper* covers, so as to be forwarded by mail to any part of the country; the postage of which, cannot exceed 44, and probably not 25 cents, to any part of the county.

Published at 35 Wall street, N. Y., by

a12 tf D. K. MINOR & J. E CHALLIS.

JUST received, and for sale at the Agricultural Warehouse, 31 Barclay street, a number of Greene's Patent Hay and Straw Cutters. This Machine, for simplicity of construction, and ease and rapidity in working, is superior to any machine of the kind for sale in the Union.—To stock Farmers, and the proprietors of Livery Stables, it is invaluable, and would save its cost in a very few months' use. j5 d&c 1m